REPORT RESUMES

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SIX MONTHS LATER--A COMPARISON OF CHILDREN WHO HAD HEAD START, SUMMER, 1965, WITH THEIR CLASSMATES IN KINDERGARTEN, A CASE STUDY OF THE KINDERGARTENS IN FOUR PUBLIC ELEMENTARY SCHOOLS, NEW YORK CITY. STUDY I.

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DESCRIPTORS- *KINDERGARTEN CHILDREN, EARLY CHILDHOOD EDUCATION, *SOCIAL DEVELOPMENT, *INTELLECTUAL DEVELOPMENT, *ENRICHMENT EXPERIENCE, LEARNING READINESS, *FOLLOWUP STUDIES, LONGITUDINAL STUDIES, NEGRO EDUCATION, PUERTO RICANS, ACHIEVEMENT RATING, STUDENT ADJUSTMENT, BEHAVIOR DEVELOPMENT, MINORITY GROUP CHILDREN, PSI, HEAD START, NEW YORK CITY,

KINDERGARTENS IN FOUR PUBLIC ELEMENTARY SCHOOLS (ONE NEGRO, TWO PUERTO RICAN, AND ONE MIXED) IN NEW YORK CITY WERE STUDIED TO DETERMINE WHETHER A POSITIVE DEVELOPMENTAL EFFECT HAD RESULTED FROM A SUMMER HEAD START PROGRAM. THE PERFORMANCE OF 179 FORMER HEAD START CHILDREN WAS MEASURED AGAINST 388 OF THEIR NON-HEAD START CLASSMATES. SEVEN INSTRUMENTS, INCLUDING SIX DEVELOPED FOR THIS STUDY (RANKING ARRAY, COOPERATIVE RATING SCHEDULES, CALDWELL PRE-SCHOOL INVENTORY, TEACHER INTERVIEWS, CLASS OBSERVATIONS, PARENT INTERVIEWS, AND CHILD INTERVIEWS), MEASURED THE EFFECT OF HEAD START ON READINESS TO ENTER FIRST GRADE, ON OVERALL READINESS, ON SOCIAL ADJUSTMENT TO KINDERGARTEN ROUTINES, AND ON EDUCATIONAL ACHIEVEMENT. IMPACT OF THE KINDERGARTEN TEACHER WAS STUDIED, AS WAS THE IMPACT OF HEAD START ON THE KINDERGARTEN CLASS AND ON THE HOME. TEACHER AND PARENT RECOMMENDATIONS FOR HEAD START IMPROVEMENT WERE RECORDED. RESULTS INDICATED THAT ALTHOUGH NO EDUCATIONAL GAINS HAD BEEN MADE, HEAD START CHILDREN SHOW GREATER LEARNING READINESS AND EAGERNESS TO LEARN THAN NON-HEAD START CHILDREN SIX MONTHS LATER. (SEE ALSO PS 000 282, PS 000 293, PS 000 284, PS 000 285, AND PS 000 286.) (LG)

O.E.O. Project 141-61

STUDY I

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SIX MONTHS LATER

A Comparison of Children who had Head Start, Summer, 1965, with their Classmates in Kindergarten

A Case Study of the Kindergartens in Four Public Elementary Schools, New York City

by

Max Wolff and Annie Stein

PS000281

This Study, sponsored by the Ferkauf Graduate School of Education, Yeshiva University, was supported by funds from the Office of Economic Opportunity.

New York, New York
August 18, 1966

Dr. Edmund Gordon, Chairman
Department of Educational Psychology
Fernkauf School of Education
Yeshiva University
New York, New York

Dear Dr. Gordon:

Three reports on studies motivated by the Summer 1965 Head Start Program have been prepared and are herewith submitted to you.

The main study (I) dealt with children attending kindergarten for a minimum of six months, comparing those who had participated in the Head Start Program with those who had not. The purpose of this study was to evaluate the enduring effect of the Head Start Program.

The second study (II) consisted of interviewing nearly 300 parents as a means to evaluate the effectiveness of methods used to recruit children for the Head Start Program. The children of one half of these parents had attended Head Start, the children of the other half had not.

The third study (III) was concerned with the effect of Day Care on pupils discernible at the end of their third grade school experience. The achievement scores of those children who had participated in Day Care Programs were compared with the scores of their classmates who had not participated.

This report on the three studies is the result of devoted cooperation among all who took part in the Project.

Mrs. Annie Stein served as coordinator of these studies. She participated in the organization of the research in all details and supervised its execution. The wealth of resources at her command, her ability to give directions to co-workers and to work with them as a team under frequently most difficult circumstances, deserves special mention. Mrs. Stein is also the co-author of these reports.

Mrs. Esther Fink, ably supported by Mrs. Phyllis Gunther and Mr. Wayne Thompson, planned, supervised and participated in all psychological aspects of the Project, such as administering pre-school inventory tests, teachers' interviews and observations; she played an important role in finding the Day-Care pupils and in reading and comparing their achievement scores.

Mr. Leonard D. Nierenberg advised on methods for sampling as well as IBM tabulation. He organized and guided the writing of the report on the Day-Care study.

Acknowledged with gratitude is the assistance given to the Project at the Migration Division of the Labor Department of the Commonwealth of Puerto Rico. Mrs. Carmen Dinos, Supervisor of the section of Education, and her co-worker Mrs. Sara Sackett, were in charge of interviewing parents of Puerto Rican background, especially those who preferred to answer the questions submitted to them in Spanish.

Miss Tracy Batteast, Mrs. Adele Chiavetta, Miss Cia Miller, Miss Sharon Powers, Miss Ellen Rothenberg, Mrs. Muriel Silverberg, and Mrs. Lotte Wolff, and others who served as interviewers shared very effectively and frequently beyond the normal call of duty in the many essential and often tedious tasks.

Mrs. Rebecca Winton, head of the Division of Early Childhood of the New York City Board of Education and her assistant Mrs. Alice Harwood, as well as Mrs. Florence Kennedy in charge of the Day-Care programs sponsored by the New York City Department of Welfare, were very helpful to this Project; it depended on their guidance to find the Head Start and Day-Care Centers fitting the criteria for these studies and on their recommendations to get the cooperation with the staff of the Board of Education indispensable for the studies. Thanks is due to the principals of the schools involved and the teachers who gave many hours of their own time to be of service to the Project.

Dr. Vera John made many worthwhile suggestions in the design of the Project; she assisted in evaluating each step in testing kindergarten children. Her contributions were of key importance in the "six months later" study.

Last, but certainly not least, I would like to express deep appreciation and thanks for your interest in this Project, for the support you gave by pertinent and extremely helpful advice whenever we discussed problems which had came up during the work of the studies and for which solutions had to be found.

Expressing thanks should not be interpreted as displacing responsibility. The study has been under the direction and supervision of the authors of these reports who accept full and exclusive responsibility for their content and conclusions.

With personal regards,

Yours very cordially,

Max Wolff
Project Director

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I. A. INTRODUCTION

Basic to the concept of the Head Start program is the assumption that an organized program of enrichment preceding kindergarten or first grade schooling will have an important positive effect on the educational and social development of children living in conditions of poverty. Earlier studies* have shown that significant gains were made by the children in the Head Start program from June to September, 1965 as compared with a control group of children who had not participated in the program.

Ivor Kraft of the Division of Research, Children's Bureau of the U.S. Department of Health, Education and Welfare** asks:

> "What will happen next...? That will depend on what takes place in the first grade, and the second grade - and so on throughout the ensuing school careers of those children who live in low-income and slum neighborhoods.
>
> "... We can easily predict that even the finest preschool experience for deprived and segregated children will wash out and disappear as these children pass through the grades."

It is the purpose of this Study I to help answer the question and to test the prediction six to eight months after the summer, 1965 Head Start program while the children were in the kindergarten. A related study (III) of the third grade achievement scores of children who had preschooling in the New York City Day Care Centers sought to test the continuing influence of preschooling after three years in the regular grades.

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* Eisenberg, L. and Conners, C.K. "The Effect of Headstart on developmental processes." Presented at 1966 Joseph P. Kennedy Jr. Foundation Scientific Symposium on Mental Retardation, Boston, April 1966.

** Kraft, Ivor. "Are We Overselling the Pre-School Idea," Saturday Review of Literature, Dec. 18, 1965, p. 63.

These studies began after the Summer, 1965 Head Start program had ended. Study I compares the children who entered kindergarten in September, 1965 and who had participated in the Head Start program with their classmates who had not, to learn whether there were any differences in readiness to enter regular first grade classes; to ascertain in what areas of "readiness," if any, the Head Start children were advantaged and to measure such differences; to gain insights into the influence of the kindergarten experience itself and its effect on the social and educational initial head start of the children who had had preschooling.

A primary objective of this Study was to gain a many-sided view of the problem. In addition to direct testing of the children's achievement six to eight months after they entered kindergarten, the Project sought the teachers' views, tested these views in action through direct class observation, visited the parents of the children, both Head Start and their classmates, to integrate this view into the child's total experience and, to round out the picture, obtained the child's own opinions about his experience by direct interviewing of the child himself.

The children studied attend the kindergartens of four public elementary schools in New York City. The Head Start children in these schools attended three Head Start centers that were chosen for this case study with the help of the Early Childhood Division of New York City's Board of Education. The criteria for choice were 1) that the centers were considered to be "very good to excellent" by the supervisory staff of the Summer Head Start program and 2) that one was all-Negro, another predominantly Puerto Rican and the third, mixed in racial and ethnic composition.

The children from these centers were followed into the public elementary schools to which they were assigned in September, 1965. Four public schools received these children and the thirty kindergarten classes in these four schools comprise the population studied.

Four measures of social and educational "readiness" for first grade work were selected for comparisons: the child's initial adjustment to classroom routines and the length of time it took him to become fully adjusted to school routines; his behavior towards his peers and towards the teacher; his speech, work habits and listening habits; and his educational attainments - his achievement in mastery of the concepts necessary for successful first grade work.

In exploring the learning process in the kindergarten, much data was assembled on the impact of the quality of the individual teacher on the child's progress. It was found that even this factor was affected by the composition of the individual class -by the proportion of Head Start children in the class. The choice of schools to be studied permitted analysis of differences in Head Start effect on Negro children as contrasted with its effect on Puerto Rican children; differences in teacher goals for children in all-minority group classes and in mixed classes.

The parent interviews, conducted by trained interviewers who visited the parents in the home, enriched the study by bringing to it the immense enthusiasm of the parents for the Head Start program, their evaluation of the child's adjustment, behavior and achievement, the influence they felt Head Start had had on the child's progress in kindergarten and their own comparisons of the Head Start program and the kindergarten process.

An equal number of parents of children who had not had Head Start, matched by school, child's teacher, the ethnic background, age and sex of the child, were interviewed as well. Extensive demographic data comparing the home environment of Head Start and non-Head Start children was obtained.

In March through May, 1966 the Caldwell Pre-school Inventory was administered to all the Head Start children in the thirty classes and to a control group of all their classmates in fifteen of the thirty classes. Needed information on the evaluation of the test itself was gathered in addition to the data on the achievement of the children. Comparisons were made between Head Start and non-Head Start children and between Negro and Puerto Rican children in different class settings. These test results were used to check the independent teacher rankings of the children's readiness for first grade work.

A wealth of data has been assembled on all these aspects of the child's experience: his class, his teacher, his home, his race, and his own memories. Much additional analysis is needed to exhaust the many interrelations to be explored. This report gives only the findings on each of the instruments used and initiates the first of the cross tabulations and analyses the data can provide. The findings of Studies II and III are published in separate reports.

B. METHOD

Seven instruments were used to measure the various aspects of the child's progress in kindergarten and his readiness for first grade work. Of these, six are new instruments developed specifically for this Study and the seventh is the Caldwell Pre-school Inventory, used extensively during the Head Start summer program.

The populations studied with each of these instruments varied, but all were drawn from the kindergarten classes of four public elementary schools having the following composition:

	Four school totals	P.S. Negro	P.S. Puerto $Rican_1$	P.S. Puerto $Rican_2$	P.S. Mixed
All children	567	106	189	145	127
Head Start	179	54	32	48	45
non-Head Start	388	52	157	97	82
Non-Puerto Rican, Negro	270	105	58	41	66
Puerto Rican	260	1	130	104	25
Non-Puerto Rican, white	37	0	1	0	36
Percent, all	100%				
Non-Puerto Rican, Negro	47.6%	99.1%	30.7%	28.3%	52.0%
Puerto Rican	45.9	0.9	68.8	71.7	19.7
Non-Puerto Rican, white	6.5	0.0	0.5	0.0	28.3

The instruments used and the populations covered by each of these instruments were:

1. RANKING ARRAYS:

Each of the 15 teachers of the 30 kindergarten classes in the four schools was asked by her principal to rank the children in each of her classes by their readiness to enter first grade for possible placement in first grade classes in the Fall. This ranking array was completed by February 1st, 1966, all arrays in within two weeks. Those children who in the teacher's opinion were most ready for first grade work were listed first, those least ready last. The teachers were not told that this was done in connection with Head Start evaluation to prevent any bias for or against Head Start from influencing the rank given a child.

The Study then examined the rank given each Head Start child and each non-Head Start child and compared the two ranking distributions to determine whether Head Start children tended to cluster in the upper ranks. The ranking arrays were used in a variety of other ways as well, to determine the weight given by each teacher to the component factors of "readiness" as measured by other instruments and to examine the importance of the child's achievement level as measured by the Pre-school Inventory correlated with the rank assigned him by the teacher.

All the children in all the 30 kindergartens were ranked. However, we removed from the ranking those Head Start children who had had less than 19 days of Head Start and those non-Head Start children who had had previous preschooling (e.g. in other centers or in private nurseries). The ranks left by the children removed were kept open, no child changing his rank as a result of the removals. The total number of children remaining in the study of ranks was 551, of whom 168 had had Head Start and 383 had not.

2. COMPARATIVE RATING SCHEDULES:

After the teachers completed the ranking arrays they were asked to complete a two-page schedule for each child in each class, rating the child on a scale of 1 to 5 on each of several characteristics including initial adjustment to school, length of time taken for full adjustment to school routines, behavior toward peers and towards teacher, speech, work habits, listening habits and knowledge of concepts. Here again, the teacher was not aware that this rating was to be used for Head Start evaluation. This rating schedule, completed for all the children in the ranking arrays, was used to study the weight given by the teacher to the various component characteristics of "readiness" for first grade work. By comparing Head Start and non-Head Start children's ratings, a judgment can be formed of the values placed by the school on the specific gains made by children who had participated in Head Start.

3. PRE-SCHOOL INVENTORY:

The short form of the Caldwell Pre-school Inventory was administered by staff psychologists to all the Head Start children in three of the four schools. (Only one of the two predominantly Puerto Rican schools was included.) As a control, all of their classmates who had not had Head Start were tested at the same time in ten of the 20 kindergarten classes in these three schools. In all, 224 children were tested, of whom 123 had had Head Start and 101 had not. 132 of the children were non-Puerto Rican Negroes, 71 were Puerto Ricans and 21 non-Puerto Rican whites. The procedures for administering the tests are reported in Section II of this report where the results of the testing is given.

4. TEACHER INTERVIEWS:

Fourteen of the fifteen teachers in the four schools were interviewed by the psychologists who conducted the Pre-school Inventory tests and the class observations, the interview schedule including teaching experience, and other demographic data for the teachers as well as their opinions on the influence of Head Start on the individual children and on the class as a whole. These interviews helped us compare teacher goals and bias in schools with different racial/ethnic composition and provided much data on the influence of the proportion of Head Start children in the class as an educational unit.

5. CLASS OBSERVATIONS:

Fifteen of the thirty classes were observed for one full session by the same psychologists. Eight of the classes were A.M. and seven P.M. classes. Since each of the 15 teachers had two classes, these observations covered one class of each teacher. The observations were used to establish a scale of "Outstanding" to "Poor" ratings for the individual teachers for use in comparing the progress of the children in kindergartens of varying quality and the differential effect of good and poor teaching on children who had had Head Start and those who had had no previous learning experience.

The observations were a cross-check on the results of the rankings and ratings assigned to the individual children by the teachers and on the teacher interviews as well.

Among the factors recorded in the observations were the number of interactions between teacher and individual children, later cross-tabulated with the rank assigned the child to determine which children tended to be spoken to most frequently. The teacher was rated for style and tone, skill in teaching, and for evidences of racial/ethnic bias, or bias for or against Head Start.

6. PARENT INTERVIEWS:

To obtain an understanding of the home environment of Head Start and non-Head Start children and the parents' evaluation of the Head Start program compared to the children's kindergarten experience we interviewed 244 parents. Half of these were parents of children who had had Head Start, the other half, parents of their classmates who had not had Head Start. These interviews were conducted for both this Study and a companion study of recruitment procedures. They covered the four schools included in this Study and an additional three schools of similar composition. In the tables given in this report the results of the interviews with parents of children in the 30 kindergarten classes under study only are given, except in the breakdowns by ethnic background where the data for all the seven schools is reported since analysis has shown that there are no essential differences in home environments of children in the two groups of schools. The base used is provided in each tabulation.

The record cards of 860 kindergarten children in the seven schools were examined, 310 of them Head Start and 550 non-Head Start. 150 of the Head Start children were selected randomly by every other name recorded and each child so chosen was matched with a classmate who had not had Head Start by an IBM card sort. The characteristics for which the children were matched were: school, teacher, age (in half-years), sex, ethnic background, language spoken in the home and approximately the same number of siblings.

The interviews were conducted during the months of March through May, 1966 by trained interviewers of the same ethnic or racial group as the respondents, in the language preferred by the parents interviewed. Because of losses through families having moved, the final tabulations are based on 244 matched Head Start and non-Head Start completed interviews. An additional 23 interviews were completed, but their matched pairs were no longer available for interviewing. These were not included in the tabulations below except where specifically noted on the table.

The number of families interviewed for the four public schools in this Study was 138, half Head Start and the other half non-Head Start, matched on the seven characteristics described above.

7. INTERVIEWS WITH THE CHILDREN:

At the end of the administration of the Pre-school Inventory test of the Head Start children, the examiner asked the child eight questions designed to find out how much the children remembered of their Head Start experience six to eight months earlier. Most of the children responded eagerly to the questions with a flood of recollections. They were also asked to compare Head Start and kindergarten. In all, 106 children were interviewed.

C. Summary of major findings on each instrument used.

1. Ranking arrays, February 1966.

More children who had had Head Start than their non-Head Start classmates ranked in the top 30 percent of the kindergarten class in "readiness to enter first grade," and fewer were ranked in the bottom 30 percent of the class. This was true in the three minority-group schools, but reversed for the mixed school.

2. Comparative ratings for "readiness" components.

Teachers gave more weight to the "social" factors of readiness in the Negro and Puerto Rican schools. "Learning concepts" was the primary emphasis in the mixed school.

Head Start children had less difficulty in initial adjustment to kindergarten (first two weeks of year) and adjusted fully to the class routines earlier than children who had not had Head Start. By the end of November, however, the others had caught up.

Head Start and non-Head Start children's behavior towards the teacher showed no differences. The teachers themselves were a more decisive factor than participation in Head Start. In behavior towards classmates, however, Head Start children (Puerto Ricans particularly) were rated higher. Ratings for the educational aspects of "readiness" showed no consistent partern of differences. In all aspects, the rating trend was the same for the minority-group schools, reversed for the mixed school.

3. Pre-school Inventory.

There was no significant difference between the scores of Head Start and of non-Head Start children tested six to eight months after the summer program. Puerto Rican children scored significantly lower than Negro children, but there was no difference between Puerto Rican Head Start and non-Head Start children.

The P.I. scores parallel the rank assigned the children by the teacher in every school and on every subtest, of significance in evaluating the P.I. test itself. The graph of scores for minority-group children formed a normal curve, but not for the non-Puerto Rican white children. This probably indicates that the test measures the range of knowledge of minority-group children in the areas the school thinks important for first grade "readiness," but does not measure the white children's range in the same areas of knowledge.

4. Teacher observations and interviews.

Several important findings are worthy of further study.

a. The average or better-than-average teacher concentrates two-thirds of her attention on the top half of the ranked class, whether the interaction is praise, scolding or instruction.

b. A composite rating for quality of teaching was developed for each of the 15 teachers observed. Comparing the P.I. scores of classes taught by "good" teachers with those of "poor" teachers, we found:

(1) Good teaching has a small effect on Subtest I scores, covering social responsiveness, but no effect on Subtest IV which demands the most knowledge. This may reflect the limited curriculum in both types of classes.

(2) Good or poor teaching affected the Head Start children far more markedly than the non-Head Start

children. Head Start children scored higher if they had good teachers, but lower than non-Head Start children if they had poor teachers. Non-Head Start children's scores were not consistently affected by good or poor teaching.

(3) The proportion of Head Start children in a class affected the speed with which the class progressed through the curriculum.

5. Parent interviews.

Non-Head Start parents have a somewhat higher income, more one-child families, fewer very large families, fewer living on Welfare, and more education than parents of Head Start children. However, the differences are not great.

The parents spoke with immense enthusiasm of the Head Start program, reporting that their children had adjusted better to kindergarten for having attended Head Start, their behavior at home had improved, and that they had learned many new things. Their major criticisms of the program were that the hours were too short, that too many parents had not heard about the program in time and that the educational curriculum needed strengthening. They want more teaching of reading and arithmetic readiness.

The overwhelming majority of the parents in both groups want a college education for their children "in order to get along in the world today."

6. Children's interviews.

Only four of 106 Head Start children interviewed could not remember their Head Start experience six to eight months earlier. Most remembered their Head Start teacher's name. They spoke warmly and at length about what they liked most about the program. More than 40 percent of the children preferred Head Start to their present kindergarten class.

D. Home environment of the children studied.

From the home interviews it is possible to construct a portrait of the families of the kindergarten children and to determine whether those families who chose to send their children to Head Start differ from those who did not. Table 1. shows the economic level and the social structure of the families of 69 of the Head Start children and of 69 matched classmates who did not have Head Start. Table 2. compares the educational attainment of the parents of each group of children.

The first conclusion from a reading of the two tables is that there is very little variation in the general socio-economic circumstances of all the children in these four schools. The range in income level is very restricted (only four families out of 138 earn/over $7000) as is the educational background of the parents. Over 70 percent of the families have two parents at home and about the same percentage live on the wages of the father. Fourteen percent of the mothers go to work. About 25 percent of the families have the mother as head of the household and about the same percent live on Welfare.

With uniform consistency the families of children who were not in the Head Start program are somewhat better off economically than those who sent their children to Head Start. The non-Head Start families are better represented in the $5,000 to $7,000 income group; they have only half as many in the dire poverty (under $3000) income group, and fewer of them are on Welfare. There are more one-child families among them, fewer very large families and, for both fathers and mothers, non-Head Start parents have had more education than parents of Head Start children.

Table 3. which is based on the home interviews with kindergarten parents of three similar schools in addition to the kindergarten parents in the four schools in this Study, depicts the differences between the Negro families and the Puerto Rican families.

The Negro families have characteristics very similar to the total sample. Non-Head Start Negro families have a somewhat higher income than Head Start Negro families. (The modal income for non-Head Start families is $5-7,000 as against a mode of $3-5,000 annual family income for Head Start families.)

Non-Head Start Negro families have fewer children, fewer mothers as heads of family and fewer on relief than Negro Head Start families.

The Puerto Rican non-Head Start families show the same economic advantages in family size and annual family income over Puerto Rican non-Head Start families but differ from the Negro families in one regard. A higher percentage of Puerto Rican non-Head Start families than of Head Start families are on Welfare and a higher proportion have the mother the head of the household - the opposite of the trend in Negro families. Comparing families on Welfare, Negro Head Start families have 30 percent on Welfare, Puerto Ricans only 18 percent. But Negro non-Head Start families have only 21 percent on Welfare, Puerto Rican 23 percent. The same contrasts exist for mothers as head of the household. A possible explanation is that Puerto Rican mothers living alone with their children on Welfare are much more isolated and circumscribed in their contacts with the outside world and hence had much less opportunity to learn about Head Start than Negro mothers in the same predicament.

TABLE 1.

HOME ENVIRONMENT OF CHILDREN WHO ATTENDED HEAD START CENTERS AND OF THEIR KINDERGARTEN CLASSMATES WHO DID NOT IN FOUR PUBLIC ELEMENTARY SCHOOLS, NEW YORK CITY.

	69 H.S. parents	69 non-H.S. parents
Ethnic		
Non-Puerto Rican Negro	42	42
Puerto Rican	24	24
Non-Puerto Rican white	3	3
Children under 18 at home		
1 child	7	14
2 children	15	15
3 children	17	20
4 children	13	8
5 or more children	17	12
Mother working now	10	10
Parents at home		
Father and mother	49	51
Father only	0	0
Mother only	18	16
Guardian or other	1	1
Unknown	1	1
Annual family income		
Under $3,000	12	6
$3,000 to 4,999	28	27
$5,000 to 6,999	18	25
$7,000 to 9,999	1	3
$10,000 and over	0	0
Unknown	10	8
Major income source		
Wages	47	52
Welfare, ADC	19	10
Help from family and other	1	7
Unknown	2	0

TABLE 2.

HIGHEST SCHOOL GRADE COMPLETED BY PARENTS OF H.S. AND OF NON-H.S. CHILDREN IN KINDERGARTENS OF FOUR SCHOOLS STUDIED.

Percentage distributions of those responding.

	Father		Mother	
	H.S.	non-H.S.	H.S.	non-H.S.
8th grade or less	38%	24%	25%	22%
Some high school	30	37	38	28
High school graduation	30	33	33	46
Some college	2	2	2	2
College graduation	0	4	2	2
	100%	100%	100%	100%
(Number responding)	(44)	(46)	(60)	(58)

Comparing Negro and Puerto Rican homes without regard to whether or not the children went to Head Start, we find the Puerto Ricans are economically in somewhat worse condition than the Negroes. Income is generally lower and there are far fewer single-child families. The educational level attained by Puerto Rican parents is considerably lower than that of Negro parents. Fifty-five percent of Puerto Rican fathers and 53 percent of Puerto Rican mothers had no more than 8th grade education compared to 19 percent of Negro fathers and 11 percent of Negro mothers.

However, for both groups the income level is low, not more than three percent in either group earning more than $7,000 a year, and only four percent had more than high school educations.

These findings indicate clearly that the home environments of both the Head Start children and the non-Head Start children in the kindergartens studies are very similar with a slight economic and social advantage in favor of the non-Head Start children in each of the ethnic groups.

For that reason, the changes that the Study found in the two groups of children after six to eight months of kindergarten can be attributed primarily to school-centered rather than to any home-centered factors.

Another factor influencing the children's progress is the home's aspirations and concern for the child's educational progress. Considerable data indicating strong motivation for education from the home, with no differences between Head Start and non-Head Start families was found. These findings are reported more fully in the recruitment report on Study II and described further in this report under the separate sections that follow.

TABLE 3.

HOME ENVIRONMENT OF NON-PUERTO RICAN NEGRO AND OF PUERTO RICAN KINDERGARTEN CHILDREN, BY WHETHER OR NOT THEY ATTENDED THE HEAD START PROGRAM.

Relative percentage distributions.

	Non-PR Negro		Puerto Rican	
	H.S.	non-H.S.	H.S.	non H.S.
Children under 18 years at home				
1 child	12%	28%	5%	11%
2 or 3 children	39	39	52	50
4 or more children	49	33	43	39
Mother working now	17%	17%	16%	11%
Parents at home				
Father and mother	60%	67%	87%	73%
Father only or mother only	34	28	11	23
Guardian and other	3	3	2	4
Unknown	3	2	--	--
Annual family income				
Under $3,000	14%	8%	11%	21%
$3,000 to 4,999	38	31	66	57
$5,000 to 6,999	22	36	18	20
$7,000 to 9,999	3	3	0	2
$10,000 and over	0	0	0	0
Unknown	23	22	5	0
Major income source				
Wages	60%	67%	82%	73%
Welfare, ADC	30	21	18	23
Pension	0	0	0	0
Other (support)	6	10	0	4
Unknown	4	2	0	0
(Number interviewed)	(72)	(72)	(44)	(44)

II. INFLUENCE OF HEAD START ON THE CHILD'S "READINESS" TO ENTER FIRST GRADE, SIX TO EIGHT MONTHS LATER.

This section analyzes the findings of the various instruments used on the child's overall "readiness," and on the major components of "readiness" including social development (adjustment to school routines and behavior towards peers and teacher) and educational gains; Head Start's impact on the kindergarten class; the influence of the quality of teaching on Head Start and non-Head Start children and the impact of Head Start on the home.

A. Effect of Head Start on overall "readiness," social and educational progress.

1. Overall "readiness" for first grade work.

a. Teacher rankings of children.

Finding: Children who had had Head Start in the summer of 1965 tended to be ranked in the highest ranks of their kindergarten classes (first to third deciles) in greater proportions than children who had not had Head Start, after six months of kindergarten. They appeared with less frequency in the bottom three deciles of the class than non-Head Start children.

Since the teacher ranked each child in each of her classes without knowing that Head Start children would be separated from non-Head Start children in the analysis, teacher bias for or against Head Start was sharply modified. The ranks assigned to the children by the teacher at the request of the principal are substantially the rankings that will be used for placement of the children into homogeneous first grade classes in September, 1966 in these four schools. Hence, the children's educational futures are patterned by these rankings and any advantage held by Head Start children is apt to be reinforced in the later grades.

Chart 1. and accompanying Table 4. show the percent of Head Start children in each decile of the class and the percent of non-Head Start children in each decile.

Chart 2. and accompanying Table 5. separate out the ranking results for each of the four schools studied. In the all-Negro school, the top 30 percent of the ranks held 33 percent of the Head Start children and only 26 percent of the non-Head Start children. Only 18 percent of the Head Start children were found in the bottom 30 percent of the class contrasted with 42 percent of the non-Head Start children. In the Puerto Rican schools, Head Start children predominated in the upper three deciles, 37 percent Head Start to 26 percent non-Head Start for one school and 50 percent Head Start to 28 percent non-Head Start for the other. There was less difference in the bottom three deciles of the class for these schools. PR_2 found a higher proportion of Head Start than of non-Head Start children in the lowest three deciles (37 percent to 29 percent) although PR_1 had only 22 percent Head Start to 33 percent non-Head Start in these ranks. One explanation for this finding in one of the Puerto Rican schools is that there were a larger number of non-English speaking children in PR_2, and, as shown later, teachers tended to rank non-English speaking children in the bottom ranks if they were unable to communicate with them.

An interesting finding that requires further analysis of the individual children is that in the mixed school, exactly the opposite result is obtained. (See Chart 2.) Head Start children appear with less frequency than non-Head Start children in the upper ranks and with greater frequency than non-Head Start children in the lower ranks. An explanation is that the non-Puerto Rican white children who attend this mixed school (coming from a middle-income housing project in the neighborhood) are ranked higher by the teachers than the Negro and Puerto Rican children whether the latter had Head Start or not.

b. Parent's evaluation of the overall influence of Head Start on the child's progress in kindergarten.

The influence of the home's attitude is certainly an important aspect of the child's "readiness" to progress in his school career. Several questions asked of the children's parents in the home interviews were designed to measure these parental attitudes.

Finding: The enthusiasm of the parents for the Head Start program is unanimous almost to the point of euphoria. However, it was not an uncritical acclaim. Parents reported in detail the specific gains they felt their children had made. Many of these will be described throughout this report.

One of the reasons why parents were delighted with the program is that they had more limited objectives in sending their children than some of the more far-reaching claims made by many promoters of the Head Start program.

A study of the reasons why parents sent their children to Head Start, reported in detail in Study II, indicates that the majority of

CHART 1.

TEACHERS' RANKING OF CHILDREN BY "READINESS TO ENTER FIRST GRADE"

Percent of all H.S. Children in Each Rank
Percent of all non-H.S. Children in Each Rank

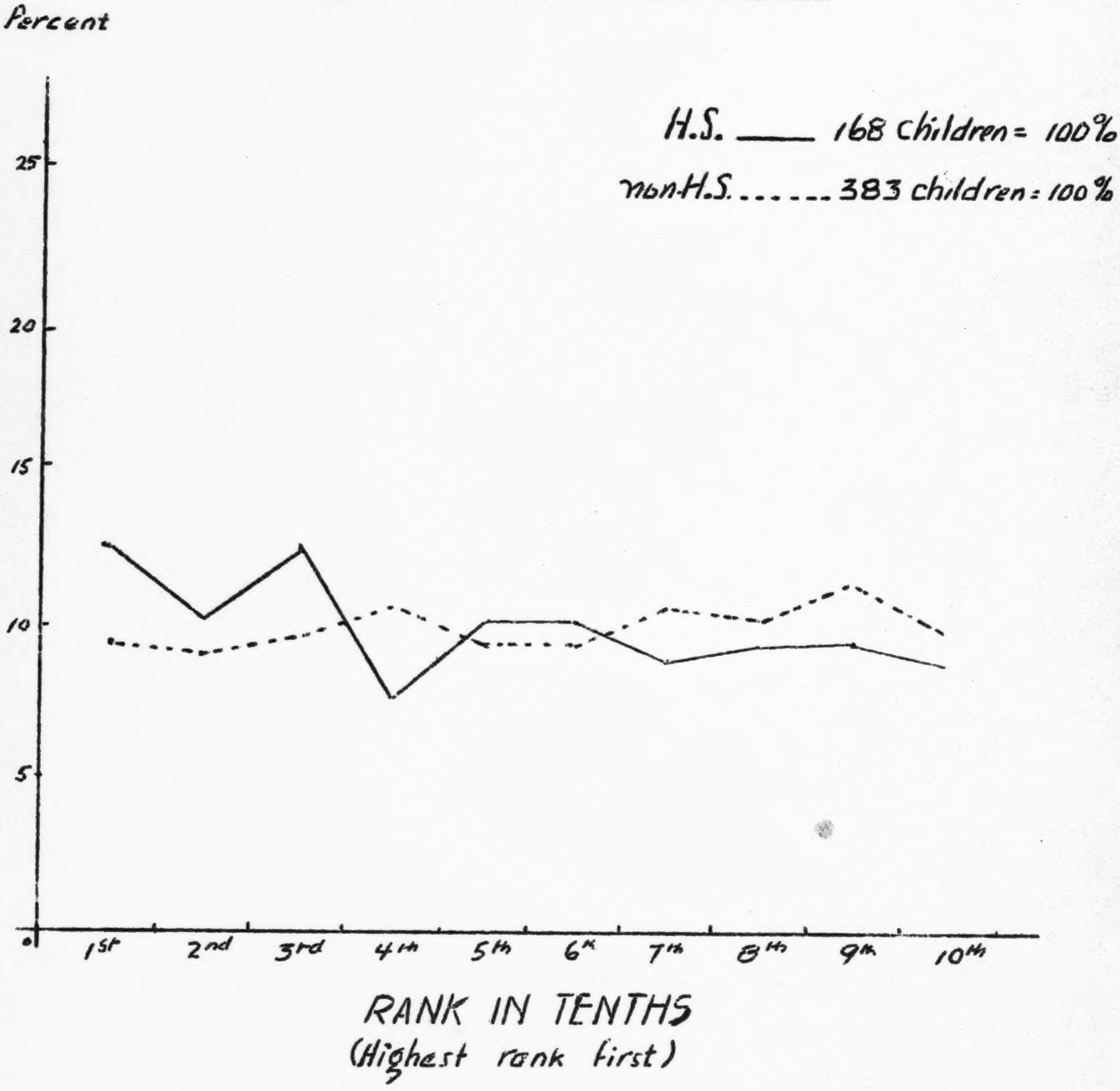

TABLE 4.

TEACHER RANKING OF "READINESS TO ENTER FIRST GRADE" OF HEAD START AND NON-HEAD START CHILDREN FOR ALL SCHOOLS STUDIED.

	Rank in deciles	Percent of Head Start children		Percent of non-Head Start children	
(most "ready")	1st	12.5	35.1%	9.4	28.2%
	2nd	10.1		9.1	
	3rd	12.5		9.7	
	4th	7.7		10.7	
	5th	10.1		9.4	
	6th	10.1		9.4	
	7th	8.9		10.7	
	8th	9.5	27.9%	10.2	31.6%
	9th	9.5		11.5	
(least "ready")	10th	8.9		9.9	
		99.8%		100.0%	
(No. children ranked)		(168)		(383)	

PERCENT OF H.S. AND OF NON-H.S. CHILDREN, BY SCHOOL

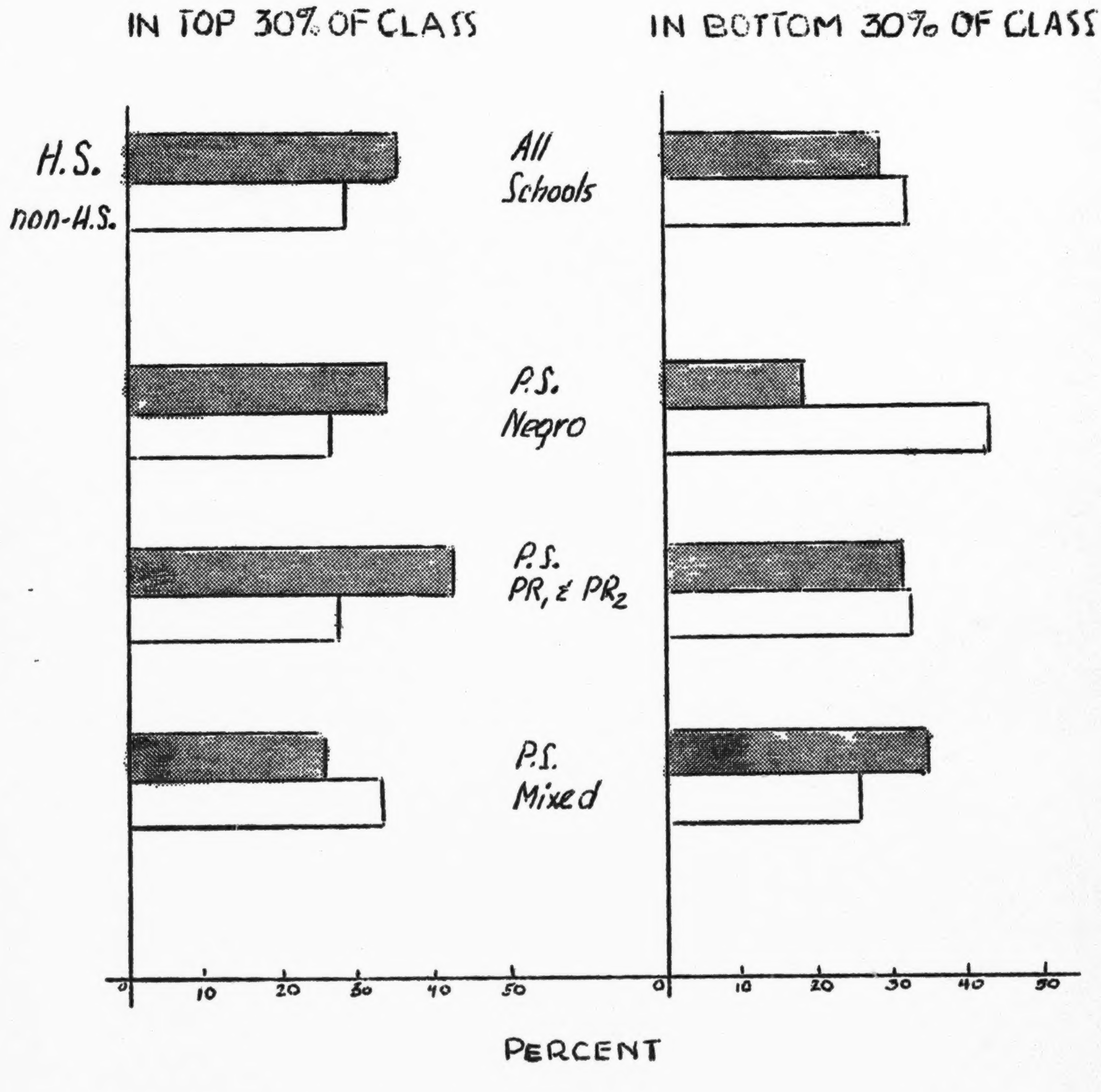

CHART 2.

TEACHER RANKING FOR "READINESS TO ENTER 1st GRADE

TABLE 5.

TEACHER RANKING OF "READINESS TO ENTER FIRST GRADE" OF HEAD START AND NON-HEAD START CHILDREN, BY SCHOOL.

Comparative percentage distributions.

	P.S. Negro		P.S. PR$_1$	
Rank in deciles	H.S. children	non-H.S. children	H.S. children	non-H.S. children
1st	10.2%	9.4%	18.8%	8.4%
2nd	12.2	5.7	15.6	9.7
3rd	10.2	11.3	15.6	9.7
4th	10.2	9.4	9.4	9.7
5th	12.2	7.5	6.2	9.1
6th	10.2	9.4	6.2	10.4
7th	16.3	5.7	6.2	9.7
8th	6.1	11.3	3.1	13.6
9th	8.2	15.1	9.4	10.4
10th	4.1	15.1	9.4	9.1
	99.9%	99.9%	99.9%	99.8%
(No. children ranked)	(49)	(53)	(32)	(154)

	P.S. PR$_2$		P.S. Mixed	
Rank in deciles	H.S. children	non-H.S. children	H.S. children	non-H.S. children
1st	15.2%	8.2%	7.3%	12.7%
2nd	8.7	9.3	4.9	10.1
3rd	13.0	8.2	12.2	10.1
4th	4.3	13.4	7.3	10.1
5th	10.9	9.3	9.8	11.4
6th	6.5	10.3	17.1	6.3
7th	4.3	12.4	7.3	13.9
8th	15.2	8.2	12.2	5.1
9th	8.7	11.3	12.2	11.4
10th	13.0	9.3	9.8	8.9
	99.8%	99.9%	100.0%	100.0%
(No. children ranked)	(46)	(97)	(41)	(79)

---

the parents (62 percent) sought "better preparation for kindergarten" including primarily the social gains of becoming accustomed to the routines of going to school, of playing with other children and of getting used to the teacher-child relationship. Twenty-three percent sought specific educational gains for their children.

In the first of these objectives the parents were not disappointed; in the second, a substantial minority felt strongly that too little had been learned.

In answer to the question: "On the whole, was the effect of Head Start on your child very good, fair, mixed-good and bad, a waste of time, very bad," not one parent chose any response but "very good" or "fair." Of the 69 Head Start parents interviewed in these four schools, 86 percent said the effect was "very good" and fourteen percent chose "fair." Separated by ethnic background, we find that 92 percent of the Negro parents chose "very good" and 86 percent of the Puerto Rican parents.

In response to the question, "Comparing your Head Start child with your older children, do you see any difference in his learning progress in kindergarten?", 63 percent of those who could make such comparisons thought he had made "better progress" than the older children, 22 percent said "about the same" and fifteen percent, "slower progress."

By ethnic group the responses were sharply different although in the same direction. Negro parents were not quite as enthusiastic about their children's progress as Puerto Rican parents. Fifty-one percent of the Negro parents as contrasted with 87 percent of the Puerto Rican parents thought their Head Start child had made "better progress" than the older children. Fourteen percent of the Negro parents as against only three percent of the Puerto Rican parents thought their children had made "slower progress." For the response "about the same," there were 35 percent of the Negro and only ten percent of the Puerto Rican mothers and fathers.

c. The Head Start child's own recollections of his Head Start experience.

After administering the Pre-school Inventory, the examiners asked eight questions of those children who had attended Head Start to learn what, if anything, they remembered of the summer experience six to eight months earlier.

Question 1. "Do you remember the school you went to before this when you had a different teacher?"

Of the 106 children interviewed, only four said that they did not remember going to school during the summer. Most of those children that said "Yes" remember their teacher's name. Some of the responses to this question were:

> "Miss F___, Mrs. M___, and I forgot the other teacher."
>
> "Miss Show-Off."
>
> "Yes, but I forgot the teacher's name."
>
> "Head Start."

Question 2. "Did you have fun there?" One hundred said "Yes," three "No," three did not remember.

This question seemed to bring back some memories of the summer. "Yes, we had all of that food." "She took us in the yard."

"Going on a trip, I saw animals, lions and ducks." One youngster said, "But I don't like her anymore because she's too little."

Question 3. "Did you do a lot?" A flood of answers was released by this question. Only four children said they did not remember, two said "No." The 100 children that answered gave 257 answers that could be categorized. The most popular answers were:

blocks	31
coloring and drawing	24
doll corner play	24
puzzles	23
painting	20
playing	15
food	12
toys	10
games	9
writing names and letters	6
trips	6
singing	6
play in yard	4

Among the answers that could not be categorized but seem to give the essence of the Head Start experience:

"Make a bird"

"Make a flower"

"Make a moon, played games"

"Played Johnny-run-around"

"She let me read the children a book and she made the rest of the children listen."

"She let us make an ash tray for our mother."

"They used to give me soup."

"I made a picture of a snowman and I went in the street."

"Lots of stuff."

"Not so much. Draw, car and cat and dog and played with blocks."

"Make flowers."

"There was a park and they had real good things - round things. In the project there was a blue door, and there was another door. They got costumes there, and I got dressed up like that - Superman and Robin."

"She took us to a big park and I drank water, ride a boat and she took us to the zoo."

"They had dentists there, blocks, train had wheels that you put on, saw blast off into space."

"Put my head down."

"Made a man - played with her rat and didn't scratch it, only rub it."

"Write and I even know how to write my name."

Question 4. "What did you like best?" We received 95 responses. Only four could not remember or express their preferences.

Playing with blocks was most popular	13
Color, paint, draw	12
Doll corner	11
Toys	7
Trips	6
Playing	5
Teacher	4
Books and stories	4
Food	3

Dolls, write on blackboard, puzzles, other children, make believe boat, live animals were remarked on by two children each, and learning, puppets, jump rope, singing, instruments, people cards, were some of the things that were mentioned once by some youngster.

Other memories reported were:

> "Eating food and going out to places."
>
> "Merry-go-round with sticks - wanted to make an Indian."
>
> "Airplane that I made."
>
> "I like Miss S___ hair and her dress."
>
> "You could build something nice with those blocks."
>
> "Ketchup juice."
>
> "Took rat out of cage and then I rub it and she didn't get angry and then I paint on the wall and she let me do it."
>
> "The best I like - I hope I never went out of her class."
>
> "I was thinking of it at my house one day, I like to paint."
>
> "She was nice. She let us play all day without ringing the bell."

Question 5. "Do you have fun now?" One hundred answered "Yes." Three said "No." Three said "Don't remember." Some comments:

> "Don't like kindergarten now."
>
> "Yes, sometimes."
>
> "When I first got there I knowed the names of the boys and girls."

Question 6. "Do you do a lot now?" This question again elicited a flood of answers, 257 responses that could be categorized with only three "Don't know." A few could not be put into any one area. For example:

> "I tell stories and I draw and play with people and don't fight in school. Michael fights all day."
>
> "My teacher makes me do everything."
>
> ".... Make believe I was playing Batman and all that. I took my Batman things everyday but now they don't let me."
>
> "You can make like a map."
>
> "We look at books when we come to school, then we pledge, then we get some toys to play with."
>
> "Puzzles make me sleepy."
>
> "Draw an elephant."
>
> "Everything."

Blocks, cars and animals	32
Coloring, drawing	26
Play in doll corner	24
Painting	22
"Yes"	19
Puzzles	17
Playing	10
Toys	10
Make things	10
Writing names and letters	7

Question 7. "What do you like best about kindergarten?" 130 responses. Six gave no answers. Doll corner and blocks seem to be the most popular areas, each receiving 16 answers.

Painting	15
Puzzles	13
Coloring and drawing	13
Playing	8
Toys	8
Reading books	5
Playing with cars	4
Teacher	3

Making things, puppets, the children, instruments, everything, each were mentioned by two children. Learning to do work, finger paint, going to the park, games, playing policemen, helping teacher were among the activities that were mentioned once.

Question 8. Our last question was, "Which class did you like better?" Most of the youngsters again replied - some unable to express the reason for their choice. Forty-three preferred their summer Head Start class and 56 the kindergarten class they are in. Seven did not know which they preferred. One of the reasons mentioned most frequently was lunch.

Some of the other reasons for Head Start preference were:

"Cause she didn't holler."

"Played a lot."

"She don't scream at us and she give us lunch."

"Because teacher nice to me."

"I could do a lot of things, I could paint when I want and I could draw when I want."

"She learned us a lot and she don't fuss."

"Because it was good."

"They have a lot of parties and I like to play in the park."

"Because the kids were good."

Among the reasons for preferring kindergarten were:

"Because it is school."

"'Cause they got more children."

"Because we draw a lot and play a lot, sometimes go out to play."

"Because I learn the days, colors and painting."

"Better now because Mother takes you there."

"Makes more fun and do more stuff."

"Her play games."

"I can make stuff 'cause its nice in here."

"Here better, this class not noisy, the other noisy."

"We always play Batman."

"This class no screaming."

"'Cause everytime I go to the bathroom in the other class, the girls try to look at me. Its better now."

Summary:

The youngsters who had the Head Start experience seem to remember it well and for the most part were able to show specifically that they knew the difference between their present class and their former class experience. They seemed to enjoy remembering Head Start and took pleasure in enumerating the various activities in both situations (questions 3. and 6.) and gave as many as they could remember.

The children uniformly expressed pleasure at their memories of Head Start and even in the 57 cases where kindergarten was preferred to Head Start there were no strong negative responses to the questioning about their Head Start experience. Although it was six to eight months later in their short lives, 43 of the 106 still preferred the Head Start class to their present kindergarten class.

We could not say that these children differed in their communicativeness and ability to express themselves from the non-Head Start children who were tested but not interviewed. All were responsive to the examiners.

The impressive number of children who retained word memories of Head Start indicates clearly that Head Start had a lasting influence on them.

Perhaps another conclusion that can be drawn is the desire of the children for "real school," "for books," "for writing," expressed by many, showing an eagerness and readiness for first grade work.

2. The influence of Head Start on the child's social adjustment to kindergarten routines.

a. Initial adjustment to entering school and later adjustment to the school-day routines.

To gauge the effect of the Head Start experience on the child's ability to fall smoothly into regular kindergarten life, we interviewed the teachers in all of the kindergartens under study and checked the responses made by teachers by analyzing the findings of the comparative rating schedules filled out by each teacher for each child. Another view of the same questions was supplied by the parents who were interviewed at home.

Findings: When interviewed, the teachers differed in their evaluation of the influence of Head Start on the child's initial difficulties in coming new into the class. Analysis later showed that those teachers who had fewer than 25 percent Head Start children in their classes thought that Head Start had made no difference. Where Head Start children made up 50 or more percent of the class, the teachers all thought Head Start had helped the individual child's initial adjustment.

Of the fourteen teachers interviewed, nine felt that any initial advantage in social adjustment to school evidenced by Head Start children had disappeared after the first few months of kindergarten. Of the four teachers who thought the advantage had persisted, three had been closely associated with the Head Start program, two as Directors and one as a teacher in the program. One teacher attributed any later advantage or disadvantage solely to the individual Head Start teacher the child had had.

A more objective evaluation of both initial and later adjustment is available to us through the comparative rating schedules completed by the teachers for each of their children at the same time that the class ranking array was prepared (February, 1966). The teacher was not informed that her comparative ratings of each child were to be used in connection with Head Start evaluation. She rated each child on a variety of characteristics that enter into "readiness for first grade work," as that child compared with the average for his class. A rating of 1 through 5 was secured with 1 the highest rating, 5 the lowest. Each child was rated for adjustment to school routine on admission to kindergarten and also on later adjustment. The ratings were defined as follows:

> On admission to kindergarten: difficulty in leaving person who brought him to school for the first week or two of the term.
>
> COMPARATIVE RATING: (Check one)
>
> 1. said goodbye cheerfully and joined in the routine.
> 2. overcame reluctance to part in short time.
> 3. overcame reluctance after an average length of time.
> 4. took longer than usual.
> 5. cried excessively or refused to participate for more than two weeks.

On later adjustment, the teacher was asked to check the month during which the child had learned the class routine and accepted it. A rating of 1-4 designated the months of September, October, November and December respectively, with a rating of 5 to be applied to children who had not adjusted at all.

For all four schools combined, Head Start children had a very substantial advantage over non-Head Start children in initial adjustment as shown by these relative frequencies:

	Percent	
	H.S.	non-H.S.
Rating on initial adjustment		
1	64%	40%
2	27	29
3	7	22
4	2	5
5	0	4
	100%	100%
(No. of children rated)	(154)	(332)
Rating on later adjustment		
September	70%	56%
October	18	25
November	5	12
December	3	4
Not yet adjusted	4	3
	100%	100%
(No. of children rated)	(154)	(331)

The ratings present a much more consistent picture of the Head Start children's initial advantage over non-Head Start children than that given by the same teachers when directly asked the question. Sixty-four percent of the Head Start children as against 40 percent of the non-Head Start children were rated 1 in initial adjustment. Combining ratings 1 and 2, we find that 91 percent of the Head Start children adjusted in a short time as against 69 percent of the non-Head Start children. By the end of September, Head Start children still maintained a lead in later, full adjustment, although the lead was lessening. By the end of October, 88 percent of the Head Start children were fully adjusted and 81 percent of the non-Head Start. By the end of November, most of the children were fully adjusted to the school routines and any advantage held by Head Start children has vanished. This finding does conform to the majority of the teachers' reports to the interviewers in answer to the direct question.

Table 6. gives the breakdown of the teacher ratings by school.

The parents' views of the same questions were obtained in the home interviews.

In answer to the question: "Did your child have a hard time leaving you at the beginning of Head Start?", only 14 percent said "Yes," nine percent said "A little" and 77% said "No." When asked, "Comparing Head Start and kindergarten, did your child have as hard a time leaving you in September for kindergarten and how do you account for it?", 51 percent said "About the same" and 43 percent said that their children had adjusted more readily to kindergarten than to Head Start. Most of them attributed the greater ease of initial adjustment to the fact that Head Start had accustomed the children to school. Six percent of the parents reported that their children had had a harder time adjusting to kindergarten, many because the school to which the children had been assigned was different from the school they had attended for Head Start, some because the children did not like the kindergarten teacher.

In answer to the question: "How did he adjust to kindergarten work?", 45 percent of the parents said "Faster than to Head Start" (nine percent of them specifically attributed it to Head Start), 41 percent saw no difference between later adjustment to Head Start and to kindergarten and ten percent thought their children took longer to adjust to kindergarten than to Head Start.

Table 7. gives the breakdown of these responses by racial and ethnic background. (All breakdowns by racial and ethnic are based on the 7-school tabulations which include the four schools in this Study plus three others of the same composition.)

Puerto Rican children generally had greater difficulty than Negro children in both initial and later adjustment. The language barrier handicapped many of the children since only one of the 15 teachers had a speaking knowledge of Spanish. It is explained also in part by the custom in Puerto Rican families of keeping the very young children close to home with few opportunities to play freely with their peers. In the recruitment study, (II), Puerto Rican parents more frequently than Negro parents gave as their reason for sending their children to Head Start, "to help him get used to being away from me."

TABLE 6.

TEACHER RATINGS OF CHILDREN FOR INITIAL ADJUSTMENT AND FOR MONTH OF FULL ADJUSTMENT TO SCHOOL ROUTINES, BY HEAD START AND NON-HEAD START CHILDREN, FOR EACH SCHOOL STUDIED.

Relative percentage distributions.

(Ratings, 1=best to 5=poorest)

	Initial adjustment			Month of full adjustment	
	H.S.	Non-H.S.		H.S.	Non-H.S.
PS Negro					
1-	70%	67%	Sept.	67%	33%
2-	26	24	Oct.	20	45
3-	0	2	Nov.	7	17
4-	4	7	Dec.	2	5
5-	0	0	Not yet adjusted	4	0
	100%	100%		100%	100%
(N=)*	(46)	(42)		(46)	(42)
PS Puerto Rican$_1$					
1-	56%	31%	Sept.	75%	53%
2-	28	26	Oct.	16	21
3-	16	30	Nov.	9	17
4-	0	6	Dec.	0	5
5-	0	7	Not yet adjusted	0	4
	100%	100%		100%	100%
(N=)	(32)	(136)		(32)	(136)
PS Puerto Rican$_2$					
1-	45%	24%	Sept.	57%	55%
2-	38	34	Oct.	21	28
3-	14	33	Nov.	2	6
4-	3	5	Dec.	10	5
5-	0	4	Not yet adjusted	10	6
	100%	100%		100%	100%
(N=)	(42)	(84)		(42)	(84)
PS Mixed					
1-	88%	63%	Sept.	85%	80%
2-	12	31	Oct.	12	15
3-	0	4	Nov.	3	4
4-	0	0	Dec.	0	0
5-	0	2	Not yet adjusted	0	1
	100%	100%		100%	100%
(N=)	(34)	(70)		(34)	(69)

---

* N represents the number of children rated.

TABLE 7.

PARENTS' RESPONSES TO QUESTIONS ON INITIAL AND LATER ADJUSTMENT TO HEAD START AND TO KINDERGARTEN, BY ETHNIC GROUP.

Relative percentage distributions.

"DID YOUR CHILD HAVE A HARD TIME LEAVING YOU AT THE BEGINNING OF HEAD START?"

	Negro parents	Puerto Rican parents
Yes	12%	27%
A little	7	11
No	81	61
(No. of responses)	(72)	(44)

"COMPARING HEAD START AND KINDERGARTEN, DID YOUR CHILD HAVE AS HARD A TIME LEAVING YOU IN SEPTEMBER FOR KINDERGARTEN?"

	Negro parents	Puerto Rican parents
Easier to Kindergarten	53%	45%
About the same	46	45
Worse than to Head Start	0	10
Don't remember	1	0
(No. of responses)	(72)	(44)

"HOW DID HE (SHE) ADJUST TO KINDERGARTEN WORK?"

	Negro parents	Puerto Rican parents
Faster than to Head Start	57%	48%
Same as to Head Start	35	34
Slower* than to Head Start	3	16
Don't know	5	2
(No. of responses)	(72)	(44)

---

* Half of those who said "Slower" attributed it to change of school building or to kindergarten teacher.

b. The influence of Head Start on the child's behavior towards his peers and towards his teacher.

"Readiness" for first grade work involves the social adjustment to one's peers in the classroom situation and to the teacher. To what extent does Head Start help the child make this social adjustment?

In the teacher interviews, the direct question was asked of the children's kindergarten teachers. Of the 14 teachers interviewed, seven thought that Head Start children were better adjusted to their classmates than non-Head Start children, five saw no difference and two are new teachers and said they could not make the judgment for lack of experience.

There was more unanimity on the question of pupil-teacher relations. Nine of the 12 teachers who answered the question felt that Head Start had helped the child relate to a teacher. One other teacher, the one rated best by the observation team, felt that if the child had a poor Head Start teacher he would have a harder time relating to the kindergarten teacher than a non-Head Start child who had not had previous experience.

In the tabulation of the teachers' comparative ratings for behavior, however, the findings reversed these evaluations made by the teachers when asked the direct question. Each teacher rated each of her children on the scale of 1, best to 5, poorest for behavior towards peers and towards teacher. The Head Start children's ratings were then compared to the ratings for non-Head Start children.

The description for each rating was:

BEHAVIOR: (Try to ignore behavior due to language difficulties.)

1. Towards peers in organized play -

COMPARATIVE RATING: (Check one.)

...(1) participates eagerly, shows leadership, frequently chosen by others as a partner.
...(2) likes organized group work or play, can show leadership, not as popular as the children in group (1).
...(3) average participation and acceptance by this group.
...(4) shows reluctance to participate in group play; is generally unnoticed by peers.
...(5) dislikes organized play; habitually withdrawn or disruptive of the group activity; generally disliked.

2. Towards teacher - response to routine directions, e.g. "Put away the blocks."

COMPARATIVE RATING: (Check one.)

...(1) eager, responds to requests quickly.
...(2) agreeable, needs little help.
...(3) needs average support in following directions.
...(4) tends to ignore requests; needs repeated help to comply, even when he understands the direction.
...(5) refuses to comply or actively resists.

Combining the ratings for all four schools, we find that Head Start children compare with non-Head Start children as follows:

Relative frequency distribution.

	Behavior towards peers		Behavior towards teacher	
Rating	H.S.	Non-H.S.	H.S.	Non-H.S.
1	24%	18%	27%	26%
2	17	19	19	18
3	45	42	36	38
4	13	18	17	17
5	1	3	1	1
	100%	100%	100%	100%
(No. of children rated)	(154)	(331)	(153)	(330)
Arithmetic mean rating	2.5	2.7	2.5	2.5

Contrary to the teacher interviews, the teacher ratings indicate that behavior towards peers is somewhat affected by Head Start, but that behavior towards teacher is not affected by Head Start after six months of kindergarten schooling.

Although the differences between Head Start children and non-Head Start children in behavior toward peers is not great, it is consistent throughout the distribution for all schools and is consistent for three of the four schools taken separately.

If we compare the arithmetic means of the ratings on behavior towards peers for each school we find:

	H.S.	Non-H.S.
PS Negro	2.5	2.7
PS PR_1	2.6	2.9
PS PR_2	2.3	2.8
PS Mixed	2.5	2.3

The same finding for the mixed school with regard to ratings on adjustment to school routine obtains for behavior toward peers, i.e., that in the mixed school the trend is reversed and non-Head Start children are rated higher than Head Start children, possibly for the same reason suggested in the earlier finding. The non-Head Start children include many middle-incomed whites who are likely to be rated higher by the teachers than the Head Start children. For the three other schools, although the differences between Head Start and non-Head Start are small, the trend is consistent and unmistakable. The largest difference is in P.S. Puerto $Rican_2$, reinforcing the earlier finding that young children in Puerto Rican homes have less experience in playing with their peers than Negro youngsters.

Hence the Head Start experience gives the Puerto Rican child a substantial advantage over his Puerto Rican classmate who did not have as much previous experience playing with his peers.

In behavior towards teacher there was no firm trend, two schools showing Head Start children behind non-Head Start, one showing them ahead and one showing no difference. The means for the four schools combined show no difference between Head Start and non-Head Start. A reasonable explanation is that the differences in kindergarten teachers was a more decisive influence on the teacher-child relationship than the Head Start experience.

How do the parents of the Head Start children evaluate the effect of Head Start on the children's behavior?

In response to the question: "Did you notice any change in your child's behavior at home because of going to Head Start?" 53 percent found improved behavior, 13 percent found no change and two percent thought Head Start had caused worse behavior. (Four schools only.) Separated by ethnic groups, these responses were, for all seven schools:

	Negro parents	Puerto Rican parents
Improved behavior	57%	75%
No change	39	20
Worse behavior	3	5
No opinion	1	0
	(72 responses)	(44 responses)

The parents' descriptions of the nature of this changed behavior are informative. Negro parents tended to report that the children seemed more "organized" in their behavior; that they were able to play by themselves for longer periods of time constructively. The Puerto Rican parents found that the children played better with their sisters and brothers and were more relaxed at home.

Both of these reports would tend to substantiate the findings on the ratings that Head Start had influenced the children's relationships to each other.

We have found that Head Start children had an advantage over non-Head Start children in speed of adjustment to school routines and in behavior towards their peers. Cooperativeness with the teacher was not significantly different for the two groups.

Of how much importance are these advantages gained by Head Start children in assessing their "readiness" for first grade work?

Since it is the kindergarten teacher who makes the judgment of "readiness" that determines whether the child in these schools will go into a "fast-moving" or a "slow-moving" first grade class, it would be important to know what value she places on these social aspects of "readiness."

The teachers were asked the question: "In your opinion, what are the most important things a youngster learns in kindergarten that prepare him for first grade work?"

We categorized the answers by whether they were "S" for social or "E" for educational learnings. "Social" included such attributes as cooperativeness, school orientation, listening, trust in teacher, self-control and the like. "Educational" included work habits, thinking things out, following directions and language development. The basic educational attribute, described by the teachers as "learning concepts," is marked E* as presumably the most direct educational experience.

A listing of the "most important things a youngster learns" arranged in the order of importance given by each teacher for each school is as follows:

	Teacher 1	Teacher 2	Teacher 3	Teacher 4
PS Negro	S	S	S	
	S	E*	E	
	S	E	S	
	E	S		
PS PR_1	S	E	S	S
	E	S	S	E
	S	S	S	S
	E*	E*		
PS PR_2	S	S	S	S
	S	S	S	E
	S	E*	E	S
	S		E*	S
	E		E	S
	E		E	E*
			S	
PR Mixed	S	E*	E*	
	E	S	S	
	E*	S		
	E	S		
	S			
	S			

The contrast between the standards set by teachers in the three minority-group schools and in the ethnically-mixed school is striking. The actual learning of concepts (E*) is listed first by two out of the three teachers in the mixed school with the third teacher listing it third out of six important preparations for first grade work. In the Negro school, only one of the three teachers even mentioned the learning of concepts and she listed it second in importance to a social attribute. In PS PR_1 two out of four teachers mentioned it, but listed it last. In the other Puerto Rican school, "learning concepts" was mentioned by three of the four teachers, but given last place in importance by two of them and fourth in importance by the third teacher.

It would be hazardous to generalize only from this sample of schools, but the findings here are consistent with Dr. Martin Deutsch' finding* that lower goals are set for the children in the Harlem schools that he observed. In Dark Ghetto, Dr. Kenneth B. Clark reports similar findings made by the Har-You study of Harlem Schools. He comments, at page 132:

> "A key component of the deprivation which afflicts ghetto children is that generally their teachers do not expect them to learn."

The critical importance of intellectual activity as contrasted with emphasis on behavior of children by teachers has recently been confirmed by Dr. Leon Eisenberg and Dr. C. Keith Conners in their Head Start study "The Effect of Teacher Behavior on Verbal Intelligence in Operation Headstart Children." In this paper, they conclude:

> "The two clearest findings from this study are that teachers who place a high value on intellectual activity produce significantly more PPVT growth than those who do not value such activities...." (p. 9)

However, even if undue emphasis is placed on social adjustment by the teachers in the Negro and the Puerto Rican schools, it does play a role in "readiness for first grade work." The finding that Head Start children show some advantage over non-Head Start children in three out of the four areas of social adjustment after six months have elapsed is of some positive value in better preparing them for first grade work.

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* Deutsch, Martin, "Minority Group and Class Status as Related to Social and Personality Factors in Scholastic Achievement," Society for Applied Anthropology, Monograph No. 2, 1960.

3. Influence of Head Start on the educational achievement and knowledge of concepts of kindergarten children, six to eight months later.

The basic instrument used to measure educational "readiness" for first grade work was the Caldwell Pre-school Inventory, widely used during the Head Start program. In addition, the teachers' comparative ratings on achievement factors of "readiness" are tabulated and the parents' evaluation of the educational impact of Head Start recorded.

a. The Pre-school Inventory: procedures used.

The test was administered to all the kindergarten children, both Head Start and non-Head Start, in ten kindergarten classes in three of the four public elementary schools studied. In addition, all of the Head Start children in the ten remaining kindergarten classes in these three schools were tested. Children with severe physical or mental impairments, those who had been absent for more than 50 percent of the school year through January, 1966 and non-Head Start children who had had any pre-school experience were not tested.

In all, 224 children were tested, of whom 123 were Head Start and 101 were non-Head Start, as follows:

	Total	nonPR Negro	Puerto Rican	nonPR white
All children	224	132	71	21
Head Start	123	81	36	6
non-Head Start	101	51	35	15

The test used was the Pre-school Inventory, developed for the summer Head Start program, 1965, by Dr. Bettye Caldwell. This is an individual 20-to-30-minute test. The examining team included two educational psychologists who gave the tests themselves as well as supervising four especially-trained research assistants employed by the project. The examining team was interracial. In the predominantly Puerto Rican school, the test was translated and given in Spanish where appropriate, with the help of the education department of the Commonwealth of Puerto Rico office in New York City. In each of the schools, special rooms were made available for the examiners' use. Children were sent to the examining room by the teacher in numbers equal to the number of examiners, other children taking their places as the tests were completed. The order of the four subsections of the test was not uniformly adhered to. With children who were resistant to initial verbalization, less verbal sections of the test were administered first.

On the whole, the children showed great eagerness to take the test. Although it took nearly 30 minutes to administer, their interest and attention did not flag. Some difficulty in establishing rapport was experienced in the Puerto Rican school with a few of the children. In two cases, it was impossible to elicit any response at all from the child. In these instances, the examiners asked the child's kindergarten teacher to give the test, with the same result. The teacher said that these children had been completely non-verbal all year.

In scoring the test, the examiners followed the manual developed after the summer program was over (the revised version of the scale.) On question 81, however, children were given credit for describing the sky as "white," since the sky actually was white on those days. In scoring questions 43 through 47, the examiners did not give a 0-1-2 score, giving instead, a score of 1 for credit and of 0 for no credit.

The Pre-school Inventory was chosen after a study of several other instruments* was made because it seemed most appropriate to the measurement of the educational achievement of children as an aspect of "readiness" to enter first grade. The concepts tested in this Inventory are those a child is expected to understand if he is to succeed in mastering the curriculum presently in general use in public school first grade classes.

It concentrates on knowledge that the youngsters have acquired rather than testing for innate cognitive functioning. It measures the child's performance in the following areas: basic information and vocabulary; number concepts and counting; concepts of size, shape, motion and color; concepts of time, object class and social function; visual-motor performance; following instructions; and independence and self-help.

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*Tests reviewed: New York Pre-reading Assessment, Board of Education of the City of New York: Bureau of Educational Research, J. Wayne Wrightstone. (Being field tested.)
The Reading Prognosis Test, S. Feldmann and I.M. Mahler, Institute for Developmental Studies, Department of Psychiatry, New York Medical College.
New York Reading Readiness Test, Board of Education of the City of New York: Bureau of Educational Research.
Lee-Clark Reading Readiness Test, Kindergarten and Grade I, J. Murray Lee and Willis W. Clark, California Test Bureau: Del Monte Research Park, Monterey, California
Developmental Test of Visual Perception, Marianne Frostig, Consulting Psychologist Press: Palo Alto, California.
Metropolitan Raading Readiness Test.
Peabody Picture Vocalulary Test.

Test I: tests knowledge of the child's own personal world (name, address, parts of body) and his ability to establish rapport with and respond to another person.

Test II: Associative Vocabulary. Requires the ability to demonstrate awareness of the meaning of a word by carrying out some appropriate action or by making a verbal association. Item units include supplying verbal or gestural labels for certain actions, events or time sequences, and being able to describe verbally the essential characteristics of certain roles.

Tests III and IV: Concept Activation. Tests knowledge of ordinal or numerical relations and concepts such as form , color, size, shape and motion.

The only comparisons of scores made in this report are internal, -between the various groups of children tested by this Study. Further work needs to be done to relate these children's scores to a standardized score in each test. Further clarification is needed also on the significance of each of the four subtests, -the degree to which each measures social rather than specific educational achievement and the weights to be given each subtest in determining a child's overall "readiness" for for first grade work.

b. The Pre-school Inventory findings.

There is no significant difference between the scores of Head Start children and their classmates in kindergarten who did not have Head Start as measured by the Pre-school Inventory six to eight months after the summer Head Start expeiience. This finding obtains in all of the four subtests of the Inventory.

This finding holds for the children in the three schools tested, taken together, and for each of the schools taken separately. If comparisons are made between nonPR Negro children, Puerto Rican children and nonPR white children without regard to whether or not they had Head Start, the Puerto Rican children are found to score significantly lower than either of the other two groups.

Another finding relates solely to the P.I. itself. Since it is in the process of development, the results of this Study can be used to increase our knowledge of the dependability of the test. It was found that kindergarten children in minority-group, low-income schools achieve scores on this test that fall into a nearly classical normal curve. This would indicate that close to a full range of their achievement in the areas considered important by the schools is covered by the test, for both Negro and Puerto Rican children. NonPR white children in better economic circumstances tested cluster at the higher scores and do not drop off, indicating that the full range of therr achievement is not tested.

Another finding of interest is that there is a close parallel between the scores achieved on the P.I. and the teachers' ranking of the children in a class by"readiness for first grade work," indicating that the P.I. does measure those achievements valued by the school system in the context of its current first grade curriculum.

The percentage distribution of scores for the Head Start children compared to the non-Head Start children tested are presented in Table 8. In addition, the three score averages, arithmetic means, medians and modes, are shown for each group.

The means show no pattern of differences in P.I. scores for any of the four tests. There is a maximum difference of 0.3 in the means of the scores with Head Start ahead by this much or less in three out of the four tests. The medians also are close, but here the non-Head Start children score slightly higher, in three of the four tests. The modal values also give non-Head Start the lead in three out of four tests. Since the differences are very small, they can be significant only if they are consistent throughout several measures. This is not true of these score distributions.

Table 9. pins down the lack of significance of these differences more closely, showing the ranges and standard deviations. The results of a t-test that was applied to the distributions are also shown to be a firm finding of no significant difference between Head Start children's scores and those of their non-Head Start classmates. Chart 3., comparing the curves of the two distributions for each subtest, gives visual evidence both of the closeness of fit of the two sets of scores and of the normalcy of the distributions.

Table 10. provides the same information for each of the schools studied, comparing the mean scores of Head Start and non-Head Start children. For the all-Negro school, Head Start means were slightly ahead in three out of four of the tests, but again only by a maximum of 0.3. Since the Puerto Rican school children's mean scores showed a consistent advantage in favor of the H.S. children, reaching a maximum of 0.8, a t-test for significance was applied to the scores in this school separately. The results were equally as conclusive, showing no significant difference between the Head Start and non-Head Start scores.

Significant differences were found between the scores of Negro, Puerto Rican and nonPR white children as shown in Table 11. These children's scores were combined by ethnic/racial group without regard to which school they attended or to whether or not they had had Head Start. The distributions are of the scores of 131 nonPR Negro children, 69 Puerto Rican children and 21 nonPR white children.

Striking differences were found between the scores of Puerto Rican children and the others. The means of the scores of Puerto Rican children were lower than those of the other two groups and the range of their scores went lower than for either of the other two groups.

This finding was borne out by the experience of the examiners in administering the tests. The language barrier was reduced to a minimum by administering the test in Spanish wherever the child seemed more at ease in that language. The tests were given to such children by examiners who were themselves Puerto Ricans with a fluent knowledge of Spanish or were administered under their close supervision.

The examiners observed that the children born in New York City had more difficulty with the test than those Spanish-speaking children who were born in Puerto Rico. Some of the New York-born children could not express an abstract concept such as "round" in either language, although they may have understood the concept. Those born in Puerto Rico were more fluent in Spanish.

Since this test was administered to the children after they had attended the kindergarten for six to eight months, the question arises as to why they had not been taught these words in English during that time. One answer may be inherent in the finding reported later in this Study (under class observations) that relatively little of the teacher's time is spent communicating with the children who are ranked toward the bottom of the class, and that non-English speaking children were frequently ranked at the bottom of the class by their teachers who had little or no knowledge of the Spanish language.

The question asked earlier in this report concerning the value placed on achievement by the teacher in her ranking of the children for "readiness" to enter first grade is answered in part by a comparison of the P.I. scores of the children grouped by the class ranks assigned them by the teacher. Chart 4. depicts the curve of the means of the children's scores for each fifth of the ranked class for subtests I and IV of the P.I. The curves for subtests II and III are similar, though not shown.

The means of the scores for each fifth of the class as charted are:

	Class rank				
	Top rank 1	2	3	4	Bottom rank 5
Subtest I	21.5	19.9	19.0	17.8	15.6
Subtest IV	16.6	16.0	14.7	14.1	12.1

The highest scores that can be achieved are 26 for subtest I and 19 for subtest IV.

There is a consistent pattern of high P.I. scores for children ranked high in the class and low P.I. scores for those in the lowest ranks.

This trend is consistent for each rank and obtains in all the schools studied.

Two interdependent conclusions can be drawn from this finding. The Pre-school Inventory is shown to be a good measure of one factor the teacher has in mind when she ranks for "readiness" and conversely, whether the teacher recognizes it or not when she verbalizes her goals for the class, knowledge of the minimal concepts tested for in the P.I. enters into her judgement of "readiness."

What other knowledge these particular groups of children may have that is not tested by the P.I. is as yet unknown, but whatever they may be, they are not the values presently considered important in our school system. Further, until the P.I. has been fully standardized, the scores of these children cannot be compared adequately with any other populations.

This Study limits itself only to internal comparisons of the children tested. The scores of the nonPR white children most of whom are of a higher income group than their Negro and Puerto Rican classmates, tend to cluster in the upper scores rather than across the range of scores although the means are not significantly greater than those of the Negro children. However, only 21 nonPR white children were tested and compared with 131 Negro children which modifies this finding even further.

TABLE 8.

P.I. SCORES OF HEAD START AND NON-HEAD START CHILDREN FOR ALL CHILDREN TESTED AND FOR EACH SUBTEST

Relative frequency distributions.

	TEST I		TEST II		TEST III		TEST IV	
Scores	H.S.	non H.S.	H.S.	non H.S.	H.S.	non H.S.	H.S.	non H.S.
Under 4	0.0%	0.0%	0.0%	2.1%	1.6%	6.0%	0.0%	0.0%
4 - 6	0.0	0.0	5.1	6.2	18.9	17.0	0.8	1.0
7 - 9	0.8	2.0	11.1	16.5	38.5	27.0	3.3	9.0
10 - 12	3.3	7.0	25.6	21.6	26.2	35.0	14.2	13.0
13 - 15	9.9	12.0	39.3	28.9	13.1	12.0	31.7	26.0
16 - 18	27.3	24.0	15.4	21.6	1.6	3.0	44.2	45.0
19 - 21	29.8	25.0	3.4	3.1	0.0	0.0	5.8	6.0
22 - 24	25.6	27.0						
25 and over	3.3	3.0						
	100.0	100.0	99.9	100.0	99.9	100.0	100.0	100.0
(Maximum Score)	(26)		(21)		(19)		(19)	
(Number children tested)	(121)	(100)	(117)	(97)	(122)	(100)	(120)	(100)

Averages

Arithmetic Mean	19.1	18.8	12.7	12.4	10.1	10.2	15.0	14.7
Median	20.1	18.7	12.2	12.3	9.2	10.0	15.0	15.1
Mode	21	23	13	15	9	11	17	16

TABLE 9.

MEANS, RANGES, STANDARD DEVIATIONS AND T-TEST OF SIGNIFICANCE OF FREQUENCY DISTRIBUTIONS OF HEAD START AND NON-HEAD START P.I. SCORES FOR ALL CHILDREN TESTED

	Subtest I		Subtest II		Subtest III		Subtest IV	
	H.S.	non H.S.	H.S.	non H.S.	H.S.	non H.S.	H.S.	non H.S.
Mean	19.1	18.8	12.7	12.4	10.1	10.2	15.0	14.7
Range	8-26	8-26	5-21	3-20	2-17	3-17	6-19	6-19
Standard deviation	3.48	3.74	3.35	3.95	2.44	3.41	2.70	3.22
t-test	1.20		.658		.09		.28	
P.	N.S.*		N.S.		N.S.		N.S.	

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*N.S. stands for No Significance.

CHART 3.

PRE-SCHOOL INVENTORY SCORES OF H.S. AND OF NON-H.S. CHILDREN.

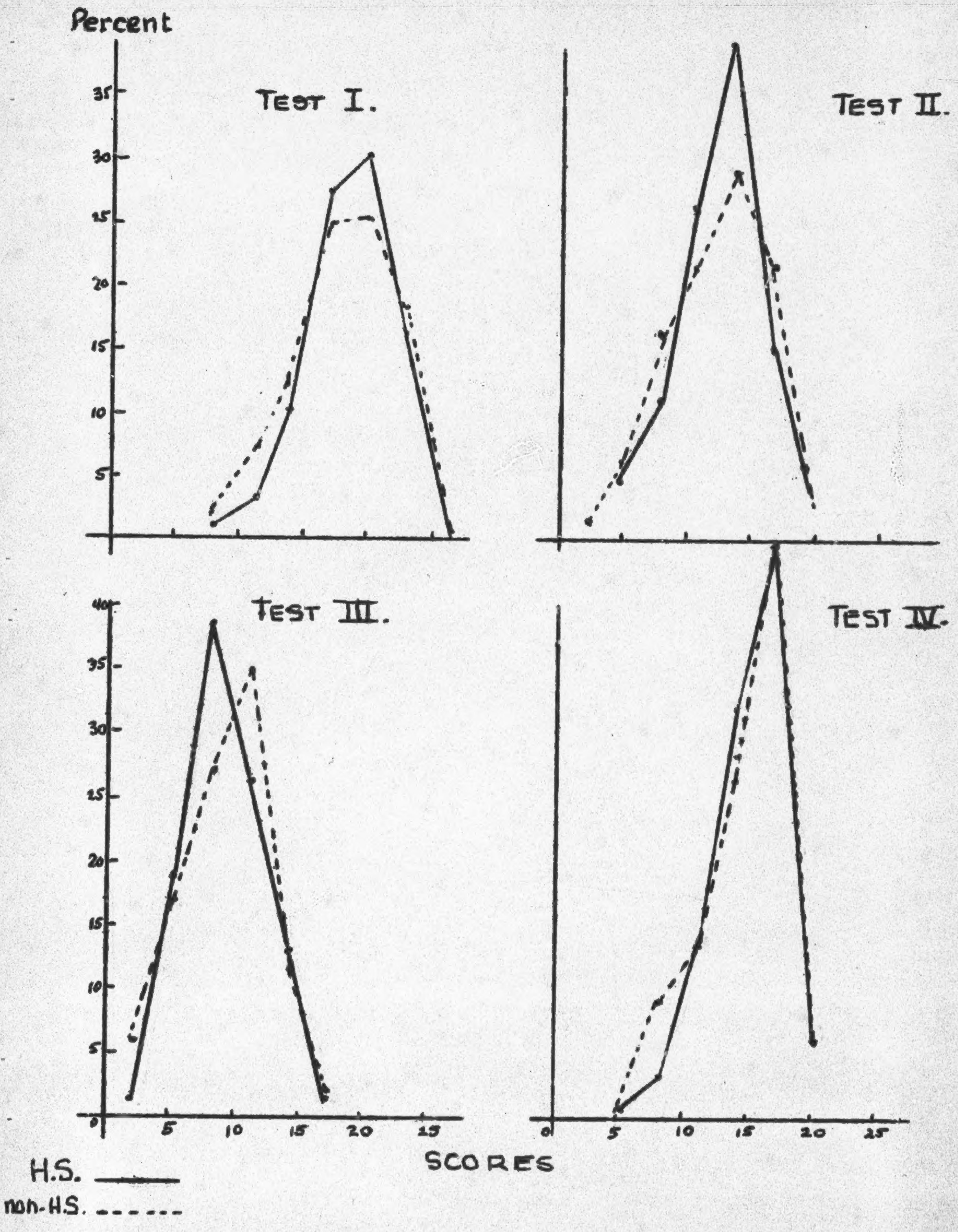

TABLE 10.

COMPARISON OF ARITHMETIC MEANS OF P.I. SCORES OF HEAD START AND OF NON-HEAD START CHILDREN, BY SCHOOL

	Subtest I		Subtest II		Subtest III		Subtest IV	
	H.S.	non H.S.	H.S.	non H.S.	H.S.	non H.S.	H.S.	non H.S.
P.S. Negro	20.8	20.5	13.9	13.7	10.0	10.2	15.5	15.2
P.S. Puerto Rican	17.4	16.6	11.4	10.7	9.5	9.4	14.1	13.4
P.S. Mixed	19.0	20.2	12.6	13.4	10.8	10.9	15.4	15.9
COMPARISON OF RANGES								
P.S. Negro	13-26	15-25	9-19	5-20	5-15	4-17	9-19	9-18
P.S. Puerto Rican	8-24	8-24	5-17	3-19	2-17	3-17	6-19	6-18
P.S. Mixed	11-25	10-26	5-21	5-19	6-15	4-17	9-19	9-19

TABLE 11.

P.I. SCORES BY RACIAL ETHNIC BACKGROUND OF ALL CHILDREN TESTED
Relative frequency distributions, means and ranges

	Subtest I			Subtest II		
	N*	PR	wh*	N	PR	wh
Scores						
under 4	0.0%	0.0%	0.0%	0.0%	7.5%	0.0%
4 - 6	0.0	0.0	0.0	1.5	15.2	0.0
7 - 9	0.0	4.3	0.0	9.2	25.8	0.0
10 - 12	0.8	14.5	0.0	20.8	25.8	28.6
13 - 15	5.3	23.2	5.0	40.8	19.7	33.3
16 - 18	19.8	37.7	25.0	22.3	4.5	33.3
19 - 21	35.1	15.9	20.0	5.4	1.5	4.8
22 - 24	34.4	4.3	50.0	--	--	--
25 and over	4.6	0.0	0.0	--	--	--
	100.0	99.9	100.0	100.0	100.0	100.0
(Number of children tested)	(131)	(69)	(20)	(130)	(66)	(21)
Arithmetic Mean	20.4	15.6	20.4	13.6	9.6	14.3
Range	12-26	8-23	15-23	5-21	1-19	10-19

	Subtest III			Subtest IV		
under 4	0.8%	1.4%	0.0%	0.0%	0.0%	0.0%
4 - 6	9.2	21.7	0.0	0.0	2.9	0.0
7 - 9	31.3	33.3	14.3	3.1	11.6	4.8
10 - 12	32.8	33.3	38.1	10.0	23.2	4.8
13 - 15	22.1	7.3	28.6	27.7	34.8	19.0
16 - 18	3.8	2.9	19.0	54.6	23.2	52.4
19 - 21	0.0	0.0	0.0	4.6	4.3	19.0
	100.0	99.9	100.0	100.0	100.0	100.0
(Number of children tested)	(131)	(69)	(21)	(130)	(69)	(21)
Arithmetic Mean	10.4	8.9	12.5	15.4	13.3	16.4
Range	3-17	2-17	8-17	9-19	6-19	9-19

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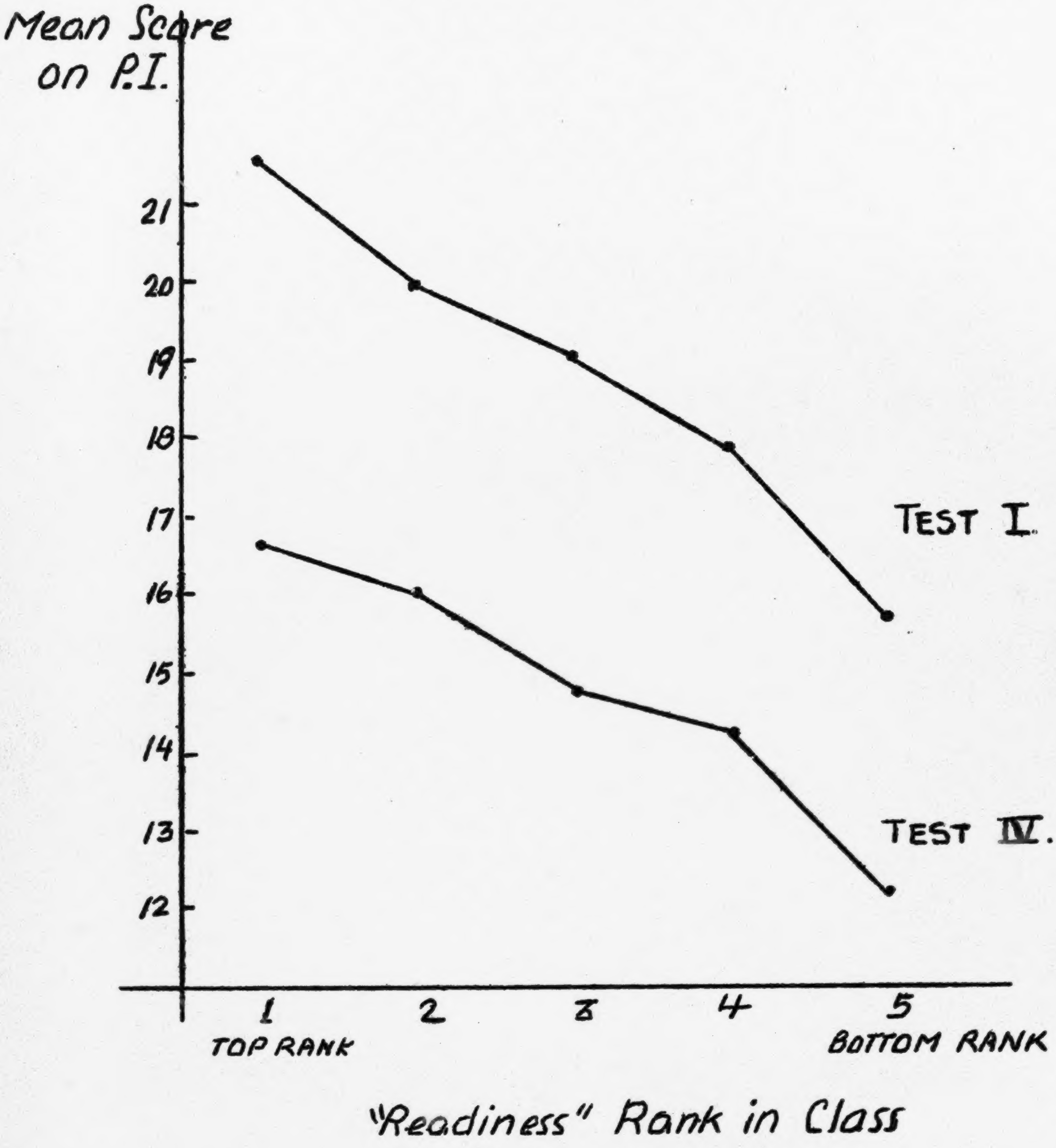
*Non-Puerto Rican Negroes and non-Puerto Rican whites.

CHART 4.

P.I. SCORES BY CLASS RANK OF CHILD.



c. Teacher ratings of children on achievement factors of "readiness."

Teachers' ratings on the comparative rating schedules for three aspects of "readiness" related to achievement--speech, work habits, and listening habits--were tabulated by the Study for all the children in the kindergartens of the four schools.

There was little or no difference between the ratings for Head Start and for non-Head Start children. Head Start children's mean ratings in the minority-group schools are slightly better than those of non-Head Start children, with the reverse true in the mixed school, as was found in each of the ratings reported earlier.

In a comparison of teachers' rankings and the ratings on these three characteristics, to learn the weight given to these factors by the teacher in determining a child's "readiness," the only one that showed any correspondence was "listening habits," a characteristic that is essentially more of a social than an educational factor.

d. Parent evaluation of the educational development of Head Start and non-Head Start children in the kindergarten

Parents of Head Start children were asked: "Did your child learn new things at the Head Start Center?" A choice of "Many," "Quite a bit," "A little" and "None or very little" was given the parents, with a request for comment on their answers.

Out of the 69 Head Start parents interviewed in these four schools, 61 (88 percent) answered either, "Many" or "Quite a bit." Twenty-one percent of the 61 commented that their children had learned letters and numbers; 13 percent that new concepts had been learned or their English improved; 26 percent emphasized the learning of the use of new materials, clay, paints, etc. by the children.

Only 12 percent of the Head Start parents thought that the amount their children had learned was "none or very little" in Head Start.

All the parents, both Head Start and non-Head Start were asked to evaluate the amount their children had learned in the kindergarten. Here there was less unanimity. Of the 138 parents (half of them Head Start and the other half non-Head Start) 67 percent thought the amount the children were learning was "just right;" 32 percent thought it was "too little" and only one percent thought they learned "too much."

Head Start parents were then asked to compare the amount the children learned in kindergarten with the amount they had learned in Head Start.

45 percent thought the learning in kindergarten was about the same as in Head Start. Many parents, in making this response, remarked that it was simply a repitition of the work done in Head Start. 29 percent thought the children had learned more in kindergarten and 26 percent thought the children had learned less in the six months of kindergarten than in the eight weeks of Head Start.

Prominent in the parents' suggestions for improvement of the Head Start program was the emphasis on the need for more direct teaching of the "letters and numbers." The third of all the parents who complained of too ltttle teaching in the kindergarten also specified their desire for the children to be taught reading and arithmetic readiness rather than the present curriculum in the kindergarten.

B. Impact of the kindergarten teacher on the Head Start and the non-Head Start child.

The kindergarten teacher is the most important single factor modifying the influence of Head Start six to eight months after the summer experience. This is especially true in view of the almost unanimous acclaim afforded the program by the parents, making the home-centered influences on the children nearly uniform.

The Study sought to evaluate the teacher variable by direct observations of the teacher in the classroom. The focal point of the class observations was the teacher and her interac tions with the children.

1. Teacher observations: method.

There were two observers, one a psychologist and former teacher, the other a teacher who had had observation experience for a similar study. Although the formal observation session was a single two-hour class period, additional opportunities for knowing the teachers and observing them in the classroom situation were provided the same two observers when they interviewed the teachers and supervised the administration of the Pre-school Inventory testing during the following weeks.

All fifteen teachers in the four schools studied were observed and, as far as possible, everything the teacher said or did was recorded. Selected for observation in the schedule were the teacher's skill in presenting material, her style and tone, and her bias for or against individual youngsters or groups of youngsters. In preparing this schedule we are indebted to Professor Eleanor Leacock for making available the schedules prepared by her for a forthcoming book on classroom teaching.*

In the area of skill, we observed: 1) how material was presented, clarity, evidence of planning, flexibility, originality of the materials given the children; 2) the content of what was presented, including the teacher's knowledge of the subject, its appropriateness to this class, its relation to the children's own experiences and 3) her ability to involve the children.

Style and tone included: 1) the level of activity that was observed, including the limits of independent movement and noise permitted; 2) the type and effectiveness of the controls that the teacher used; 3) the teacher's reaction to stress; 4) the overall functioning of the class, i.e., the time spent in going from one activity to another and the efficiency with which routines were handled; 5) the teacher's manner, her degree of professionalism; 6) her attitude toward the children; 7) her bias or partiality to specific children or groups of children.

For each of these qualities a rating was given from _1_ to _5_, from which a composite rating for each teacher was developed in subsequent analysis of the observation record.

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* Leacock, Professor Eleanor Burke, _Living and Learning in City Schools_, forthcoming Basic Books, Fall, 1967, one of a series of Bank Street College of Education Studies sponsored by the National Institute of Mental Health.

2. Background of the teachers. (From teacher interviews with 14 of the fifteen teachers.)

Ethnic:

1	Negro
0	Puerto Rican or other Latin-American
14	nonPR white

The Negro teacher taught in the Negro school.

Knowledge of Spanish:

1	fluent
7	minimal understanding
6	none

Experience:	Years as teacher	Years in this school	Years as Kg teacher
1-2 years	1	2	4
3-5 "	3	7	4
6-10 "	4	3	5
10 or more	6	2	1
	14	14	14

Head Start Experience:

Directors	2
Teachers	3
None	9

Grades taught other than kindergarten:

Nursery, 1st or 2nd grade	10
3rd to 6th grade	3
Junior or senior high school	2
None	4

(Adds to more than 14 because some teachers had more than one additional type of teaching experience.)

The teachers in the four schools studied had an unusually good experience record for schools in these areas of N.Y.C.* Only one had been a teacher for only one year; ten had had three or more years as kindergarten teachers; there was a high degree of stability of staff, 12 of the 14 having served in the same school for three or more years. There is a high proportion of nonPR white teachers, 14 out of 15, no Puerto Rican or Latin-American teacher, and only one teacher who spoke Spanish fluently.

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* A Board of Education survey of teacher needs reports that 41.1 percent of the teachers in the Special Service schools have had less than three years' experience. The Public Schools of New York City, Staff Bulletin, Vol. IV, No. 12, May 23, 1966.

3. Findings

a. Teachers concentrate their attention on the children in the upper half of the ranked class. Whether the interactions are positive controls (praise), negative controls or simply teaching, two-thirds of the interactions are between the teacher and the upper half of the pupils in the ranked class for all of the average or better-than-average teachers.

b. When the Pre-school Inventory scores are tabulated by whether the children had good or poor teachers, there was only a slightly higher mean score for the children who had had six to eight months of good teaching over the score for those who had poor teaching. Subtest I which includes the highest number of social-relationship questions show the greatest difference between good and poor teaching. Subtest IV, which tests for direct learnings shows no difference at all. The conclusion can be drawn that whether the teacher is good or poor, none of the children learn very much although there is a greater readiness for learning in the good teacher's class. This probably reflects a paucity of direct learning in the kindergarten curriculum.

c. In the good teachers' classes, Head Start children scored consistently higher than non-Head Start children. In poor teacher's classes Head Start children scored consistently lower than non-Head Start children. The difference between H.S. children's scores in good and poor classes was greater than for those classes as a whole; there was no consistent difference in scores for non-Head Start children who had good teachers and for those who had poor teachers.

4. Determination of the quality of teaching.

The ratings* in skill and style or tone given each teacher observed and the composite rating for each element of good teaching are shown in Tables 12. and 13. Based on these ratings adjusted to include bias, a composite overall rating of Outstanding, Better than Average, Average, Below Average, and Poor was given each of the 15 teachers. The quality of the teachers in these four schools based on the classroom observations were:

		Number of teachers			
	Outstanding	Better than Average	Average	Below Av.	Poor
P.S. Negro (3 teachers)	0	3	0	0	0
P.S. PR1 (5 teachers)	1	1	1	2	0
PsS. PR2 (4 teachers)	0	2	0	1	1
P.S. Mixed	0	3	0	0	0

These schools are well endowed with good teachers, only four of the 15 having a rating below average,None of the schools had a preponderance of below average teachers and two had only superior teachers.

P.S. PR_2 which had two better-than-average teachers and two below-average or poor teachers was an ideal school for measuring the influence of good and of poor teaching on the educational growth of the children. All findings of this report on this comparison are based on this school. It is important to remember that this is a 72 percent Puerto Rican school and

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* The Appendix contains a copy of the Observation schedule describing in detail the basis for determining the teacher's rating on each element scored.

TABLE 12.

TEACHER OBSERVATIONS: Rating of Teachers for Skill for each School
(1 best to 5 poorest)

	Teacher														
	P.S. Negro			P.S. PR1					P.S. PR2				P.S. Mixed		
	1a	1b	1c	4a	4b	4c	4d	4e	2a	2b	2c	2d	3a	3b	3c
Presentation of material	3	3	1	4	1	3	4	2	4	2	5	5	2	3	2
Content: knowledge of subject	3	3	1	4	1	3	5	2	3	2	5	5	2	4	3
Involvement of children	2	3	2	5	1	4	4	3	3	1	4	5	3	3	2
COMPOSITE RATING FOR SKILL	8 A	9 A	4 O	13 BA	3 O	10 A	13 BA	7 A	10 A	5 OA	14 P	15 P	7 A	10 A	7 A

O: Outstanding:	3-4
OA: Above Average:	5-6
A: Average:	7-11
BA: Below Average:	12-13
P: Poor:	14-15

TABLE 13.

TEACHER OBSERVATIONS: Rating of Teachers for Style and Tone for Each School
(1 best to 5 poorest)

Teacher

	P.S. Negro			P.S. PR1					P.S. PR2				P.S. Mixed		
	1a	1b	1c	4a	4b	4c	4d	4e	2a	2b	2c	2d	3a	3b	3c
Level of activity Controlled movement to no movement or chaos	1	2	2	5	4	4	1	2	2	1	4	4	1	1	1
Noise: busy conversation to absolute quiet or total disorder	2	2	3	4	2	1	4	1	1	1	5	5	3	3	1
Control Most effective to least effective	2	2	2	4	1	1	4	1	2	2	4	5	2	2	3
Permissive with control to rigid control or no control	1	3	3	5	1	4	3	2	1	1	2	4	3	3	1
Transitions Smooth to chaotic	2	1	1	2	1	2	4	1	1	1	5	5	2	2	1
Routines Smooth to chaotic	1	1	1	2	1	2	4	1	1	1	5	5	1	2	1
Manner Most professional to least professional	3	2	4	5	1	4	4	1	3	1	3	4	3	3	2
Attitude toward children Respect and liking to contempt and dislike	3	3	2	5	1	3	5	2	2	1	2	3	3	3	2
COMPOSITE RATING FOR STYLE AND TONE	15 OA	16 OA	18 OA	32 BA	12 O	21 A	29 BA	11 O	13 O	9 O	30 BA	35 P	18 OA	19 OA	12 O

O:Outstanding: 8-13 A: Average: 20-28 P:Poor: 35-40
OA: Above Average: 14-19 BA: Below Average: 29-34

that the findings here may not be applicable to the all-Negro school.

Bias.

Overall there was a tendency for the teacher to favor those students whose style of work resembled her own. In the area of racial or ethnic bias, the observers found that four of the fiteen teachers were prejudiced or had stereotyped attitudes toward their pupils. One teacher in the Negro school commented to the interviewers that she had come to the conclusion that Negroes were more rhythmic than whites. She tended to favor those children in her all-Negro class who exhibited such gifts, urging them to perform.

Two of the teachers in P.S. PR_1 showed bias. One, in the interview remarked, "You know what these (Puerto Rican) parents are like," to the white interviewer. The other thought, "These children need a rigid structure," and carried out her conviction by permittingl the usual free kindergarten program only one day a week.

One teacher in the mixed school commented to the interviewer that in her opinion Negroes and Puerto Ricans are receiving more than their share of the education budget. She seemed to the observers to be "picking on" the Negro child in her class.

More subtle forms of preference for whites were shown in the materials used for display in the classrooms. Nine out of the 15 classrooms had no books, pictures or other material directly related to the children in the class. Four had one or two pictures or puppets or books related to Negroes or Puerto Ricans. Only two teachers had more than this. One was in the mixed school and the other in a Puerto Rican school.

Only the one teacher who spoke Spanish included such material in her curriculum, teaching Spanish .songs to the children.

Bias for Head Start children was shown by three teachers, two of whom had directed Head Start Centers during the 1965 summer. All three called on and addressed the Head Start children in their classes many more times than the other children.

5. Effect of quality of teaching on the children.

a. Interactions between teacher and child.

Table 15. tabulates the postive and negative interactions between each teacher and the children in her class, ranked into two halves. These ranks of the children are the same as the class ranking arrays analyzed earlier in this report.

The positive interactions include words of praise and encouragement used as controls or actual teaching of subject matter addressed to an individual child. Negative interactions include the wide category of scolding, scorning, abusing or criticizing the individual child.

The total number of interactions varied greatly in the same 2-hour period. However, there is one consistent finding. About two-thirds of the teachers' interactions were with the upper half of the class, only one-third of her communication was with the slower half, for the average or better teachers. In each of these quality groups, the lower half of the class received a little higher percentage of the negative comments and a little less of the praise and education.

For the teachers below average in quality, the upper ranks of the children received 55 percent of the attention both positive and negative, with the upper ranks getting a bit more of the praise and the lower half a bit more of the scolding.

The poor teacher reversed the proportion, 58 percent of her attention directed toward the lower half of the class, with that half getting 75 percent of the negative comments. She interacted with the children least of all the teachers observed.

The observers found that the effect of this uniform pattern was to reinforce the strengths of the children rated in the higher ranks of the class and similarly, to reinforce the weaknesses of those who needed more help. In every class there was a group of children to whom the teacher never spoke, and these in this particular school included the non-English speaking children. This observation ties in with the earlier finding in the Pre-school Inventory that some of these children had not learned the English words deemed essential for "readiness" for first grade work by the school system, although they had been in the kindergarten class for six to eight months.

b. Effect of quality of teaching on Pre-school Inventory scores.

In making this analysis only P.S. PR_2 was studied because it presented the best opportunity for comparisons since two of its four teachers were rated above average and two were below average or poor. Table 16. shows the means of the P.I. scores of the children in these four classes. Section A. of the table compares the mean scores of all the children.

A striking finding is that on three of the four subtests (II-IV), those emphasizing learned knowledge, there is little or no difference in the mean scores of those children who had good teaching and those who had poor teaching. Subtest I, which reflects interpersonal relationships, shows that good teaching does raise the children's scores, since a good teacher establishes good communication with a large portion of her class. Subtest IV which is the most demanding educationally shows no difference at all between good teachers' and poor teachers' classes. A reasonable explanation may be the one indicated earlier under Findings, that the kindergarten curriculum is weakest in concept teaching and that very little is learned in either type of class.

c. Effect of good and poor teaching on children who had Head Start and those who did not.

Good teaching has a stronger favorable effect on Head Start children than on non-Head Start children. Poor teaching adversely affects Head Start children far more than it affects non-Head Start children.

These two findings are confirmed in Table 16., sections B. and C.

Reading across the table in section B., comparing the children in the good teachers' classes, we find that Head Start children consistently do better than non-Head Start children, the greatest difference appearing in the most difficult subtest IV.

When we compare the children in poor teachers' classes, still reading across the table, we find that Head Start children consistently do worse than non-Head Start children in every subtest.

To confirm this finding, we tabulated the P.I. scores of all the Head Start children in P.S. PR_2 by quality of their teachers and

TABLE 15.

POSITIVE, NEGATIVE AND TOTAL INTERACTIONS* BETWEEN TEACHER AND CHILDREN BY COMPOSITE QUALITY RATING OF TEACHER AND CLASS RANK** OF CHILD.

	Interactions (Percent for each half of class)		
	+	-	Total Interactions
Outstanding teachers (1)			
With top half of class	67%	64%	66%
With bottom half of class	33	36	34
	100%	100%	100%
(Av. no per teacher)	(63)	(22)	(85)
Better-than-average teachers (9)			
With top half of class	63%	57%	62%
With bottom half of class	37	43	38
	100%	100%	100%
(Av. no. per teacher)	(59)	(20)	(79)
Average teachers (1)			
With top half of class	71%	64%	71%
With bottom half of class	29	36	29
	100%	100%	100%
(Av. no per teacher)	(84)	(11)	(95)
Below-average teachers (3)			
With top half of class	57%	54%	55%
With bottom half of class	43	46	45
	100%	100%	100%
(Av. no per teacher)	(27)	(30)	(57)
Poor teacher (1)			
With top half of class	53%	25%	42%
With bottom half of class	47	75	58
	100%	100%	100%
(Av. no. per teacher)	(32)	(20)	(52)

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* Positive includes both controls (praise) and teaching; negative includes controls, such as scolding.

** Children ranked by teacher for "readiness to enter first grade."

by whether or not they had had Head Start. (Table 16.C.) The contrast in the scores is even stronger and in the same direction already described. Head Start children did consistently better under good teaching than they did under poor teaching. If we compare their scores with those of non-Head Start children shown in B. of the same table we find that they did much better than non-Head Start children in the good classes and consistently more poorly in the classes taught by poor teachers.

This finding indicates the hazards as well as the opportunities that are opened up by pre-schooling. It reinforces the belief that Head Start advantages can be maintained only if the level of teaching and the curriculum in the kindergarten are strong. It implies the opposite as well - that more damage is done to the child who looks forward eagerly to an educational program he has learned to enjoy than to the child who has had no previous knowledge of what to expect, if the later school experience is poor.

This bears out Dr. Edmund W. Gordon's belief* that:

> "The initial gains are not likely to hold up in the absence of a continuity of educational experience. Pre-school education, then, to be meaningful, must be followed by appropriate educational experiences of good quality in the subsequent school years."

6. The parents' view of the teachers.

The parents of both Head Start and non-Head Start children were asked to evaluate the kindergarten with regard to strictness of discipline,

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* Edmund W. Gordon, "What did we Learn," American Child, Vol. 48, No. 2 Spring, 1966, p. 11.

TABLE 16.

AVERAGE P.I. SCORES OF CHILDREN IN P.S. PR_2 BY QUALITY OF TEACHING.

A. P.I. mean scores for ALL children in four kindergarten class, two with good teaching and two with poor teaching.

	Subtest I	Subtest II	Subtest III	Subtest IV
Good* teachers	17.5	10.7	9.8	13.5
Poor* teachers	15.7	10.1	9.2	13.5

B. P.I. mean scores of Head Start and of non-Head Start children in the same four kindergarten classes.

	H.S.	Non-H.S.	H.S.	Non-H.S.	H.S.	Non-H.S.	H.S.	Non-H.S.
Good teachers	17.8	17.3	10.8	10.1	9.9	9.6	14.0	13.2
Poor teachers	14.8	16.0	9.7	10.3	9.0	9.3	13.1	13.6

C. P.I. mean scores for Head Start children only in eight classes, four with good and four with poor teaching.

Good teachers	18.2	11.6	9.9	14.6
Poor teachers	15.7	10.2	8.8	13.1

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* Good teachers were both better than average, poor teachers were below average or poor.

the amount learned, and for whether or not they found any prejudice, ethnic or racial. Head Start parents were asked to compare the kindergarten and their child's Head Start class on these same points and, additionally on how the two classes compare in interest shown in the children.

The responses given on the remaining questions were:

1. "Are you satisfied with your child's kindergarten class with regard to:

a. strictness of discipline?		Kg. compared to Head Start	
Too much	2%	More than H.S.	26%
Just right	76	Same as H.S.	57
Not enough	15	Less than H.S.	11
No opinion	7	No opinion	6
	100%		100%
	(138)		(69) H.S.

b. any prejudice?			
A good deal	3%	More than H.S.	0%
Not much	0	Same as H.S.	83
Very little	1	Less than H.S.	4
None	91	No opinion	13
No opinion	6		
	100%		100%
	(138)		(69) H.S.

c. interest in children compared to Head Start?

Kindergarten more than H.S.	20%
Same as H.S.	58
Less than H.S.	17
No opinion	5
	100%
	(69) H.S. parents

A high proportion of the parents were satisfied with the discipline in the kindergarten (76 percent) and many (26 percent) felt it was firmer than in Head Start. Some welcomed this greater formality and discipline, several commented that it was appropriate that the kindergarten should be more disciplined since the children were nearly a year older.

Over 90 percent of the parents said they found no evidence of prejudice in their child's kindergarten class, and four percent of the Head Start parents thought there was less prejudice in the kindergarten than in Head Start. There is some question as to whether the parents were entirely candid with the interviewers in this regard although they had been informed that the interviewers had nothing to do with their child's kindergarten teacher or school. However, since the proportions of favorable responses are so great it is likely that most of the parents were not exposed to the type of bias seen by the observers.

Another group of questions sought to learn whether the parents of these minority-group children felt it was important that the teachers of their children be of the same minority group. The answers are tabulated by ethnic/racial breakdown covering all seven of the studied schools.

2. "In your opinion, how important is it to have Negro, Puerto Rican or Spanish-speaking teachers for your child?"

	Negro teachers	Puerto-Rican teachers	Sp.-speaking teachers
Very important	15%	31%	51%
Good, but not necessary	9	12	24
Makes no difference	72	49	19
Bad for child	1	7	5
No opinion	3	1	1
	100%	100%	100%
(No. responses)	(144) Negro	(88) P.R.	(88) P.R.

The strongest opinion was held by the Puerto Rican parents, more than half of whom felt it was very important that their children be taught by teachers who could speak Spanish. The over-riding consideration here was that the teacher would be better able to teach the child English. However, more of the Puerto Rican parents thought it was important that the teacher have a command of the Spanish language than that he be Puerto Rican himself. Some even expressed the idea that, if the teacher were Puerto Rican, the child would tend not to learn English as rapidly. There was a wish on the part of both the Puerto Rican and the Negro parents to communicate to the interviewers that they had no bias against nonPR white teachers. "Just so long as she's a good teacher," was the most frequent comment noted.

About a fourth of the Negro parents thought it was either "Very important" or"Good but not necessary" to have a Negro teacher for their children.

On the whole, the impression given the interviewers was that the only point of substantial dissatisfaction with the kindergarten was that not enough was learned by the children.

Another finding that is at odds with the popular stereotype of thePuerto Rican parentsis their desire, frequently expressed, that their children learn to speak English well and quickly.

C. Impact of Head Start on the kindergarten class.

Fourteen of the fifteen teachers in the four schools studied were interviewed. All of the teachers had been observed and the same persons who observed the class in operation subsequently interviewed the teachers, using a questionnaire that appears in the Appendix.

Earlier in this report, the findings of the interviews on the child's adjustment to school routines and his behavior were discussed. It was reported that the teachers' opinions changed with the number of Head Start children in her class. The fewer the Head Start children, the less the teacher was aware of differences between the Head Start and non-Head Start children. When the number of Head Start children reached more than 50 percent of the class, teacher opinion became unanimous that there had been a positive effect on the children.

This led the researchers to explore further the impact on the class as a whole, and the effect on the curriculum as the percentage of Head Start children in a class increased.

Further research would be valuable to establish whether there is a qualitative change in the classroom situation when the proportion of Head Start children in a class reaches a critical size. For example, using the data collected by this Study, we could compare the Pre-school Inventory scores of children in classes with high or low percentage of Head Start children.

From the interviews with teachers, we learned the teacher's opinion on two additional classroom factors, the ease with which routines were established in the classroom and changes that had to be made in the curriculum because of the percentage of Head Start children in the class.

There was almost unanimous agreement by the teachers that Head Start children helped the whole class adjust to the regular school routine. Only two teachers felt they had made no difference in the speed of class adjustment to routines.

In their responses to the question, "Have you had to modify your basic curriculum in any way bvcause of the Head Start children's experience?" the teachers grouped according to the percentage of Head Start children in their classes thus:

Percent H.S. in class	Yes	No
25% or fewer	35%	65%
25-50%	50	50
More than 50%	75	25

Some of the comments on curriculum changes that had to be made were:

> "I had to take into account more individual differences between the children."
>
> "I have had to enrich it..follow through more, based on the children's interests."
>
> "I've given them a little more and advanced at a faster pace."
>
> "I started everything sooner, with less introduction and gone into things deeper."
>
> "Could go ahead rapidly. Gave more paints."
>
> "Children were exposed to more."
>
> "I could start painting right away."

D. Impact of Head Start on the home.

The home interviewers asked both Head Start and non-Head Start parents, "What activity, if any, have you or your spouse joined in in the present school?" Parents of Head Start children were asked also about their activity in the Head Start centers. They were asked to report how many meetings they had gone to, how many times they had helped on trips, helped at school, discussed their children's progress with the teacher and with other staff. From the responses, an "activity frequency" score was computed.

Findings:

The responses show that Head Start parents were more active in the Head Start centers than they were in the kindergarten. Non-Head Start parents were somewhat more active in the kindergarten than Head Start parents.

Summarized, the responses show:

	Mothers		
	Active in H.S.	Active in Kg.	
	H.S only	H.S.	non-H.S.
Very active	6%	6%	11%
Some activity	51	43	46
No activity	43	51	43

Only about seven percent of the fathers of either group were active in either the center or the kindergarten.*

When asked, "Do you feel welcome in the school your child goes to now?" and (for H.S. parents only), "How does kindergarten compare with Head Start in its welcoming attitude toward parents?" the responses were:

Welcome in Kg.		Compared to H.S.	
"Yes"	85% of both H.S. and non-H.S.	Kg. more welcoming	20%
		About the same	58
"No"	3%, H.S. only	Kg. less welcoming	18

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*The general level of parent activity in two of the three centers chosen for this Study was not high. Although they were chosen because they were the best in their areas, (Central Harlem and East Harlem), they were far from outstanding in the city in parent participation.

Although only two of the 69 Head Start parents felt unwelcome in the kindergarten, 12 felt that it was less welcoming than the Head Start center. However, about the same number felt that the kindergarten was more welcoming than the Head Start center, so that we cannot conclude that in these schools and centers there was any sharp difference in involvement of parents in the work of either class.

One explanation of the somewhat higher degree of participation of non-Head Start parents in the kindergarten may be the higher proportion of one-child families in this group, giving the parents more freedom to participate in the school this one child attends. Many of the parents of Head Start children felt apologetic when they reported to the interviewers that they had been active in Head Start but had not been able to be as active in the kindergarten. They explained that during the summer, with the older children at home to mind the youngest, they had had more freedom to participate.

Since the schools studied were either all-Negro, predominantly Puerto Rican or mixed, we sought to learn what the parents thought of the educational advantages or disadvantages of the type of school their children attended.

The question asked was, "In both Head Start and in kindergarten your child went to a class where the children were (all-Negro or mostly Puerto Rican or mixed, filled in appropriately for each interview).

"In your opinion, does this fact have any effect on the education your child gets?"

The answers to this question are listed separately for those parents whose children attend the five segregated schools and for those in the two mixed schools, (seven schools tabulation.)

Parents' responses - segregated schools

	nonPR Negro	Puerto Rican
Makes it a better school	1%	13%
Makes no difference	68	51
Makes it a poorer school	27	28
No opinion	4	8
	100%	100%
(No. of responses)	(126)	(72)

Parents' responses - mixed school

	nonPR Negro	Puerto Rican	nonPR white
Makes it a better school	39%	19%	42%
Makes no difference	61	75	50
Makes it a poorer school	0	6	0
No opinion	[illegible]	[illegible]	8
	100%	100%	100%
(No. of responses)	(18)	(16)	(12)

The majority of both Negroes and Puerto Ricans in the segregated school thought it made no difference to the quality of the school. Only one Negro parent thought segregation made it a better school and nine of the Puerto Rican parents. However, the Puerto Rican parents who gave this response usually commented further that they had no prejudice against the Negro children in the school, implying that they did not consider their school segregated.

In the mixed schools, nearly 40 percent of the Negroes, nearly 20 percent of the Puerto Ricans and over 40 percent of the nonPR whites thought this mixture made for a better school. The rest thought it made no difference, only one parent (a Puerto Rican) thinking the mixture made for a poorer school.

Close to 30 percent of both the Negro and the Puerto Rican parents felt that the education in segregated schools is necessarily poorer. They had stronger convictions on the subject than any of the other parents, judging by the comments recorded by the interviewers. Those who said that it made no difference simply added, "As long as the education is good." Those who were opposed to the composition of their child's school asked that the interviewers record their extended comments. Some of those recorded are:

> "White children wouldn't be allowed to go to schools where the children don't learn anything."
>
> "I wanted Ruth to go to Head Start to learn as much as the children in better neighborhoods."
>
> "Mixed school makes for more learning."
>
> "Teachers don't care to teach Negro children in segregated schools."
>
> "Since the school is all-Negro, the children are not given the best teachers or the best in educational facilities or opportunity."

Before leaving the subject of the impact of Head Start on the home, we should report our findings on the im pact of the home on the school. Contrary to prevalent opinion, our findings show that motivation for education from the home is very high, and is a strong influence on the children that could be a source of strength to the school as it proved to be in the Summer, 1965 Head Start program.

The findings of this Project on parental attitudes are reported in full in Study II on the recruitment of children into the Head Start program. We quote from that report the answers to the question asked parents, "In your opinion, how much education does a child need to get along in the world today?"

Ninety-two percent of the Head Start parents and 86 percent of the non-Head Start parents responded either "some college" or "college graduation," most of them selecting college graduation.

Not one parent thought that anything less than high school graduation could equip a child to get along in the world today. Some typical comments recorded by the interviewers are:

> "Those who can, better graduate college. If no money, they can manage with high school."
>
> "High school certificate is no use nowadays."
>
> "I would like that they would study as much as possible - at least, not to go to a factory."
>
> "If you go for work, they will choose the college graduate."

This finding is consistent with the strong emphasis placed on direct learning rather than indirect social preparation for learning by the parents throughout this report. There is no doubt that any strengthening of the Head Start and the kindergarten curricula in this direction will be heartily supported by the home.

E. Parent and teacher recommendations for improving the Head Start program.

Twenty-three of the Head Start parents had no suggestions to make. They said they liked it very much as it was last summer. The teachers liked best the small size of the Head Start classes.

SUGGESTIONS FOR IMPROVEMENT

BY TEACHERS	BY PARENTS
Curriculum	
More materials work (clay, scissors, etc.) More time on emotional and social development More articulation between kindergarten and H.S. (3) More structure and formality	More teaching, more work, including ABC's, numbers, books home. * (20) More trips (6) Educational films, choirs, picnics. (3)
Teaching staff	
No volunteers, more paid assistants Teachers better selected, including males. More respect for teacher.	More teachers (3) Negro and bi-lingual staff (3) More local people who know the community. (2) More male teachers.
Changes in organization	
	Stay open more hours (21) More money allocated for trips - parents should not pay. (2) Earlier registration (2) More English-speaking children, more mixture (2) More program preparation
Teacher-community relations	
Parents need education More work with parents	More should be explained to parents; more meetings (9) Better recruitment work (10)

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* The number making the same suggestion is recorded if more than one.

III. Conclusion

Two comments recorded by the home interviewers present our problem.

> A Negro mother: "Head Start developed a thirst for knowledge in my child."
>
> A Puerto Rican mother: "Head Start is one step forwards in terms of their whole life. You never come back."

Perhaps this Puerto Rican mother is right and there are permanent long-range gains the children have made. The warmth of the support given the program by the parents interviewed may indicate that her views are widely shared. The strong memories of Head Start retained by the children speak in support of her belief.

The findings of this Study show that, overall, the children who had Head Start still have greater readiness for learning than their classmates, six months later.

They also show that in the kindergartens studied, no educational gains had been made despite their greater "thirst for knowledge."

The finding that Head Start children do better than their classmates when both have good teachers provides the opportunity; that they do worse and are more damaged by poor kindergarten teaching than their classmates is alarming. We conclude by returning to the statement in the Introduction. Head Start cannot substitute for the long overdue improvement of education in the elementary schools which have failed the Negro and Puerto Rican children. It can only prepare them to reap the full benefits of better education when it is provided.